2003

Northern Kentucky Fiscal Conditions

Institute on Metropolitan Opportunity
University of Minnesota Law School

MUNICIPAL FISCAL CONDITIONS IN NORTHERN KENTUCKY: BOONE, CAMPBELL AND KENTON COUNTIES

Metropolitan Area Research Corporation

October 2002

Foreword

The Metropolitan Area Research Corporation (MARC) was created in 1995 by Myron Orfield, a Minnesota legislator and law professor. Orfield is a nationally recognized leader in promoting reform around the issues of land use, social and fiscal equity and regional governance. MARC's objective is to study the relationship between common regional development patterns in U.S. metropolitan regions, and the growing social and economic disparities within them. MARC also assists individuals and groups in fashioning local remedies that address these concerns. Since its inception, MARC has studied more than 30 U.S. regions, including the nation's 25 largest metropolitan areas.

This work was funded by Forward Quest, Inc., the Kentucky League of Cities, the Northern Kentucky Area Development District, the Northern Kentucky Area Planning Commission, the Boone County Planning Commission, the Cities of Alexandria, Crestview Hills, Erlanger, Florence, Melbourne, and Villa Hills, the Murray & Agnes Seasongood Good Government Foundation and the Greater Cincinnati Foundation/Northern Kentucky Fund.

MARC would like to thank the following people for their comments and assistance throughout the production of this report: Dag Ryen, Kevin Costello, Marshall Slagle, Ted Robinson, Wally Pagan, Todd McMurtry, Gary Toebben, Ivan Frye, Shad Sletto, Melissa Williams, Eric Haas, Jim Parsons, Bill Bowdy, John Mays, Jody Robinson, Trey Grayson, Tony Milburn, Jeff Koenig and Bill Scheyer. The conclusions and recommendations expressed in this report are solely those of the Metropolitan Area Research Corporation and do not necessarily reflect those of the contributing individuals or their organizations.

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I. INTRODUCTION

A. Overview

Municipal governments in Northern Kentucky face growing difficulties in financing needed local public services. There are several dimensions to the problem.

- There are wide disparities in the capacities of municipal governments to raise revenues.
- Fiscal institutions, state law and development patterns have created a growing imbalance between local revenues and expenditure needs.
- These factors combine to create significant differences in the degree of fiscal stress faced by municipalities across the region.
- The current system of local finance and planning discourages inter-local or regional cooperation on issues with region-wide significance, such as accommodating growth and maintaining the health of the region's core areas.

This report, commissioned by Forward Quest and the Leadership Task Force on Futuristic Governance, documents these problems by examining the local fiscal system in the Northern Kentucky region, including Boone, Campbell and Kenton Counties. The report begins with a short summary of local fiscal institutions in Kentucky, followed by an examination of fiscal conditions in Northern Kentucky municipalities, and finishes with a discussion of strategies for improving current conditions in the region.

B. Fiscal Institutions

Kentucky has a very centralized state-local fiscal system. State taxes represent 86 percent of total state, county and municipal tax revenues compared to a national average of just 73 percent. Local governments are also left on their own to finance local services to a greater extent in Kentucky than elsewhere – state aid to local governments in Kentucky is lower than the nationwide average. Just 8 percent of county and municipal general revenues come from the state government in Kentucky, compared to 22 percent nationwide. These patterns are reflected on the expenditure side of the fiscal system. 78 percent of direct state, county and municipal expenditures occur at the state level in Kentucky compared to 62 percent nationwide.[1]

Municipal governments in Kentucky rely much more heavily on income-based taxes than in most other states – 23 percent of municipal general revenues come from payroll taxes in Kentucky compared to 6 percent nationwide. Correspondingly, property taxes represent a much lower share of municipal revenues in Kentucky than elsewhere – 12 percent compared to 21 percent. However, the property tax is the most commonly used tax instrument. In Boone, Campbell, and Kenton Counties, for instance, all 37 municipalities in the study group assess a property tax, while 26 use the payroll tax.

Under the Constitution and statutes of the State of Kentucky, counties and municipalities may impose four types of taxes on their citizens:

1) License fees on stock used for breeding purposes

2) License fees on franchises, trades, occupations, and professions
3) Taxes on personal property in lieu of ad valorem taxes
4) Ad valorem taxes

In practice, counties and municipalities rely on the second and fourth options. The Supreme Court of Kentucky has consistently held that city-imposed income and sales taxes are unconstitutional.

Counties and cities are authorized to tax all real and personal property (ad valorem taxes) that is not exempted by the state constitution or statutes subject to the following restrictions:

1) Cities may not impose an ad valorem tax rate that results in growth in real property tax revenue in excess of four percent per year, excluding new property. Any part of the real property tax that produces more than four percent revenue is subject to recall by the voters.

2) The homestead exemption eliminates taxes on a portion ($23,100 per home in 1995-96) of the real property owned by persons over 65 years of age and persons who are totally disabled.

The most important of the license fees are the occupation tax and the insurance premiums tax. The occupational tax may be levied on those who earn money within the city limits. The tax may be levied either as a flat fee or as a percentage of compensation. Sixth class cities (cities with fewer than 1,000 residents for the most part) may not levy an occupational tax based on compensation—they are limited to a flat annual fee.[2]

Taxes on business licenses may be levied on either a flat annual or a percentage basis. Insurance companies, restaurants, and hotels and motels are subject to taxation under specific statutory authority that establishes a different taxing methodology for each. As with occupational taxes, 6th class cities must levy business license taxes on the basis of a flat annual rate. Banks, trust companies, and savings and loan associations are exempt from city business license taxation. In practice, taxes on insurance premiums dominate this category.[3]

C. Population Growth and Poverty

The three-county area of Northern Kentucky grew at a significant rate during the 1990's. Population increased by 15 percent, compared to rates of just 9.6 percent in the State of Kentucky and 7.9 percent in the Cincinnati metropolitan area.[4] However, growth was not distributed evenly across the three-county area.

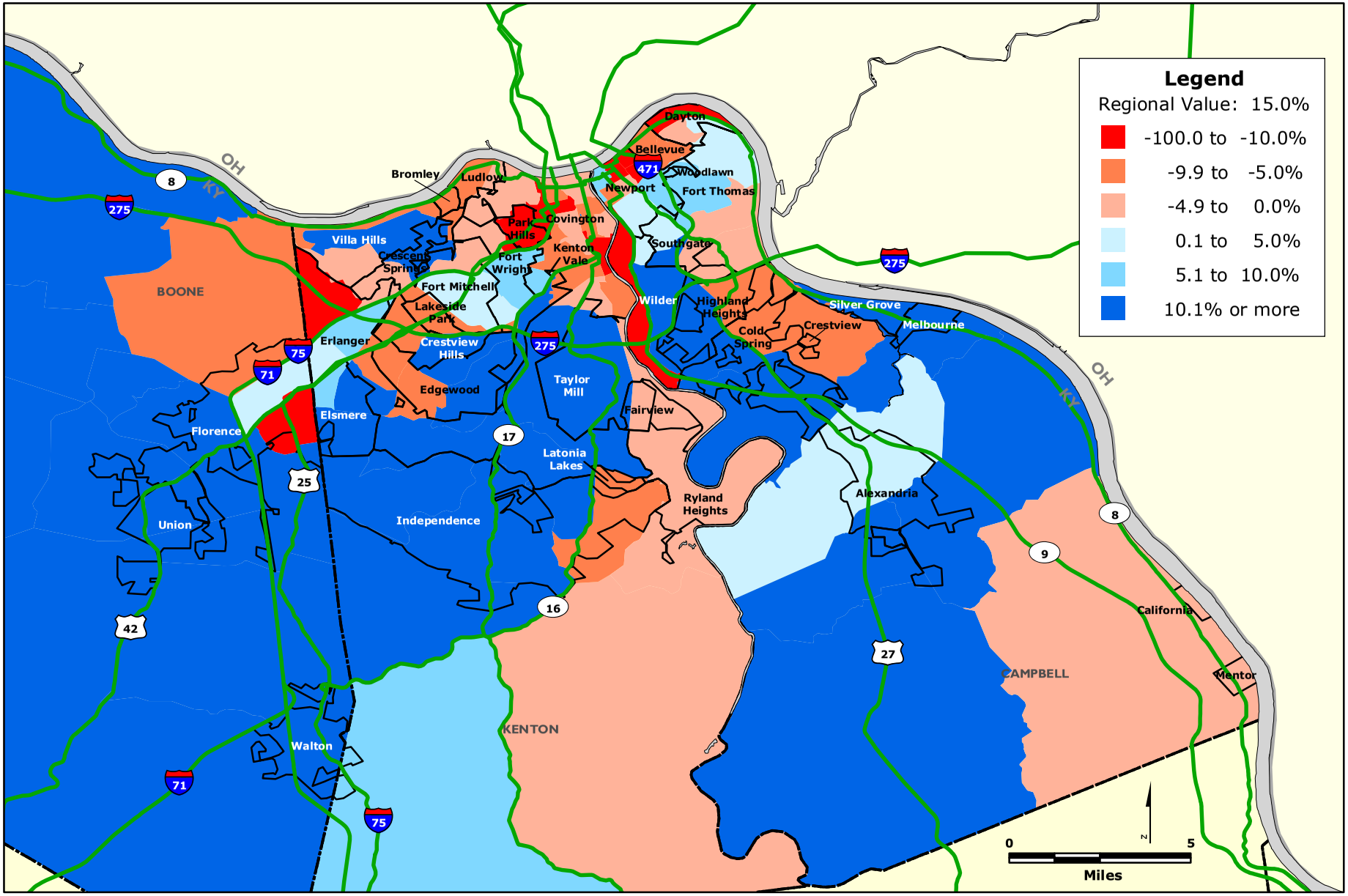
As in most urban areas, population in Northern Kentucky grew more slowly in older, more densely populated areas and more quickly in newer, suburban areas. (See Map 1.) A nearly continuous tract of land along the Ohio River—from Silver Grove in the east to the Boone County border in the west—actually lost population between 1990 and 2000. The losses exceeded 10 percent in parts of Dayton, Newport, Covington and Park Hills.

In and of itself, population decline is not necessarily a bad thing. However,

declining population is often associated with other factors of concern. It often creates fiscal stress, by increasing the per person costs of public services. In addition, it is commonly associated with high and/or increasing poverty, which, in turn, creates fiscal stress both by increasing public service costs and decreasing the resources available to finance those services.

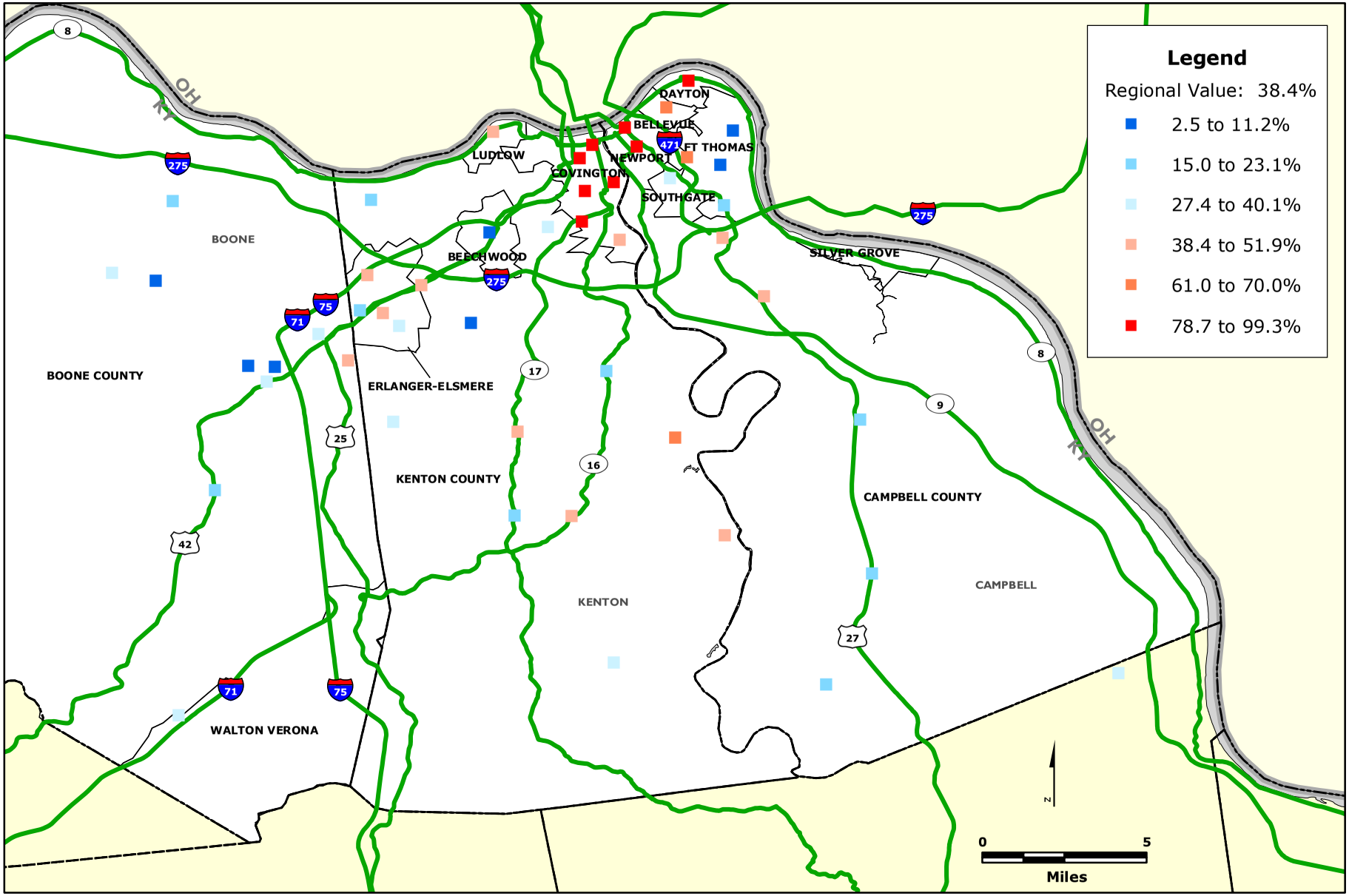
Population decline and greater-than-average poverty clearly go hand in hand in Northern Kentucky. The region's highest poverty rates in elementary schools are in the same areas as the population declines—along the Ohio River in Dayton, Bellevue, Newport, Covington and Ludlow. (See Map 2.) However, relatively high school poverty rates are evident in other parts of the region as well—in schools in central and east-central Kenton County, the Erlanger-Elsmere School District and north-central Campbell County.

Map 1
NORTHERN KENTUCKY:
Percentage Change in Population by Census Tract, 1990-2000



Data Source: U.S. Census Bureau.

Map 2
NORTHERN KENTUCKY:
Percentage of Elementary Students Eligible for Free or Reduced Cost Lunch by School, 2000



Data Source: Kentucky Department of Education and the National Center for Education Statistics.

II. LOCAL BUDGETS IN THE 1990's

This section examines municipal expenditures, revenues, tax bases and tax rates Boone, Campbell and Kenton Counties.[5]

A. Municipal Expenditures

Table 1 shows 1992 and 1998 general expenditure data for each of the municipalities in the study area and the county- and region-wide averages. During the six year period, expenditures per capita increased by 63 percent for the entire group of municipalities, from $246 per capita to $400 per capita.[6] This is considerably greater than the statewide or nationwide increases over a similar period—municipal expenditures per capita increased by 22 percent in the state as a whole and by 19 percent in the U.S. between 1992 and 1997.[7]

The most important expenditure categories were Police (31 percent of expenditures in 1998), Fire (18 percent) and Administration (17 percent).[8] This distribution was relatively stable during the period covered by Table 1—the shares for the major categories were essentially unchanged during the period. Spending for Streets grew more slowly than total spending while Waste Disposal and Other Expenditures increased their shares.[9]

Among the three counties, municipal expenditures in Boone County were most concentrated in the three "core" functions—80 percent of expenditures were for police, fire and administration in 1998—followed by Campbell (72 percent) and Kenton (66 percent).

Fifteen of 37 municipalities had "full service" governments—governments that showed spending in each of the six expenditure categories. Of these, none were in Boone, 6 were in Campbell and 9 were in Kenton. Another 10 provided services in five of the six categories—2 in Boone, 2 in Campbell, and 6 in Kenton.

All municipalities showed spending for administrative functions and most spent money for police protection (29 places) and streets (30 places). The services least likely to be provided were fire protection (provided in just 23 of 37 places) and waste disposal (provided in 27 places).

The top panel of Chart 1 shows per capita expenditures in the 37 municipalities as a group in the major categories in 1992, 1995 and 1998. (All Charts are in Appendix 3.) Police expenditures were greatest in all three years and grew steadily during the period. Spending for Fire and Administrative services showed similar growth but at lower levels. The patterns are similar in the three counties (Charts 2, 6 and 22) with Police, Fire and Administration the largest categories in Boone and Campbell Counties and the Other category edging out Streets and Administration in Kenton.

B. Municipal Revenues

Per capita revenues increased by less than expenditures in the region as a whole during the six-year period – 50 percent compared to 65 percent. Table 2 shows 1992 and 1998 general revenue data for each of the municipalities in the study area and the county- and region-

Table 1: General Expenditures Per Capita and Expenditure Shares by Type - 1992 and 1998

County	Municipality	Population 1992	Population 1998	Total Expenditures Per Capita 1992	Total Expenditures Per Capita 1998	Expenditure Shares (%): Administrative 1992	Administrative 1998	Police 1992	Police 1998	Fire 1992	Fire 1998	Streets 1992	Streets 1998	Waste Disposal 1992	Waste Disposal 1998	Other 1992	Other 1998
B	Florence	20,880	22,883	$276	$396	11 %	12 %	40 %	37 %	19 %	20 %	16 %	17 %	0 %	0 %	14 %	14 %
B	Union *	1,669	2,438	59	88	60	42	1	1	0	0	10	33	22	23	7	1
B	Walton	2,160	2,378	160	199	43	36	32	53	0	0	25	10	0	0	0	1
All Boone Cities		**24,709**	**27,698**	**248**	**352**	**13**	**14**	**40**	**37**	**18**	**19**	**16**	**17**	**0**	**1**	**13**	**13**
C	Alexandria	6,068	7,732	63	180	0	20	68	37	0	0	32	22	0	15	0	6
C	Bellevue	6,790	6,558	199	313	21	21	31	29	20	19	24	10	0	14	4	7
C	California	111	92	74	734	27	2	0	0	0	0	0	63	0	4	73	31
C	Cold Spring	3,455	3,718	162	293	61	43	36	45	0	0	2	10	0	0	1	2
C	Crestview	579	498	86	115	36	74	14	0	0	0	17	0	25	26	9	0
C	Dayton	6,268	6,042	181	347	21	18	26	26	30	27	10	12	9	8	4	9
C	Fort Thomas	16,016	16,375	269	329	19	14	26	28	20	21	23	17	0	11	12	10
C	Highland Heights	5,281	6,236	132	303	18	9	33	30	13	18	21	13	13	7	2	24
C	Melbourne	760	533	52	215	38	69	23	0	0	0	28	0	0	31	11	0
C	Mentor	171	179	39	65	100	100	0	0	0	0	0	0	0	0	0	0
C	Newport	18,277	17,355	430	609	14	29	28	29	26	22	15	9	0	5	17	6
C	Silver Grove	995	1,160	123	170	35	31	10	11	0	0	52	50	0	0	3	8
C	Southgate	3,544	3,490	294	287	10	13	22	36	6	12	14	12	10	13	38	14
C	Wilder	1,353	2,306	595	772	32	45	29	24	27	22	0	9	0	0	11	1
C	Woodlawn	309	278	25	111	50	10	25	9	0	8	24	0	0	29	0	45
All Campbell Cities		**69,977**	**72,551**	**263**	**382**	**18**	**24**	**29**	**29**	**21**	**19**	**17**	**12**	**2**	**8**	**13**	**8**
K	Bromley	1,040	889	102	186	39	41	38	27	0	0	5	0	18	32	0	0
K	Covington	42,263	43,093	421	811	9	7	28	27	28	23	18	15	5	4	12	24
K	Crescent Springs	3,425	3,804	191	320	28	21	47	41	7	7	0	15	0	6	17	10
K	Crestview Hill	2,638	2,826	227	351	28	24	33	30	6	6	19	28	12	11	2	1
K	Edgewood	8,279	9,120	152	251	31	23	36	25	0	15	15	10	16	16	2	11
K	Elsmere	6,880	7,824	137	193	23	17	48	46	0	0	15	14	13	16	1	8
K	Erlanger	16,062	16,523	195	253	19	18	45	49	8	18	10	13	11	0	7	1
K	Fairview	126	149	75	113	100	39	0	0	0	0	0	27	0	33	0	0
K	Fort Mitchell	7,587	8,063	171	296	1	24	41	34	15	11	34	13	0	13	8	5
K	Fort Wright	6,617	5,915	178	271	28	21	23	34	4	12	23	13	12	10	10	10
K	Independence	11,178	14,031	78	141	21	20	46	51	19	0	0	0	13	17	1	12
K	Kenton Vale	151	155	90	177	100	9	0	0	0	4	0	69	0	17	0	2
K	Lakeside Park	2,944	2,888	135	381	26	36	40	19	7	3	13	30	14	12	0	0
K	Latonia Lakes	409	346	55	62	100	54	0	0	0	42	0	1	0	0	0	3
K	Ludlow	4,515	4,436	112	357	29	51	52	36	2	1	15	5	0	0	2	8
K	Park Hills	3,229	3,040	175	224	16	17	42	44	3	5	14	12	12	14	13	7
K	Ryland Heights	872	817	12	37	65	67	0	0	35	0	0	13	0	0	0	21
K	Taylor Mill	6,257	6,749	147	257	24	23	31	27	16	22	29	15	0	12	0	1
K	Villa Hills	7,499	7,836	121	205	18	21	29	31	10	8	26	20	14	13	2	8
All Kenton Cities		**131,971**	**138,503**	**236**	**420**	**15**	**14**	**33**	**31**	**20**	**18**	**17**	**14**	**7**	**6**	**9**	**17**
Total		**226,657**	**238,752**	**$246**	**$400**	**16 %**	**17 %**	**32 %**	**31 %**	**20 %**	**18 %**	**17 %**	**14 %**	**4 %**	**6 %**	**11 %**	**14 %**

*: 1995 data shown in place of 1992 (not available).

wide averages.

During the six-year period, revenue per capita increased from $278 per capita to $418 per capita. Nearly seventy percent of revenue came from taxes in 1998, while state aid contributed just three percent. Payroll and real property taxes were the largest sources of tax revenue with revenue shares of 32 and 22 percent respectively in 1998. The insurance tax contributed less, but made a sizeable contribution, with a 14 percent revenue share. Payroll taxes were displacing property and insurance premium taxes during the period—the payroll tax share increased by 2 percentage points while the property and insurance premium tax shares declined by 2 points and 1 point respectively.

Although the payroll tax represents the largest source of tax revenue for the region as a whole, the property tax remains the greatest contributor to revenues in most of the region's municipalities. In 1998, 19 of 36 cities[10] relied more heavily on the property tax than the other two sources; in 11 the payroll tax had the largest share; and in 6 the insurance tax filled this role. The property tax was also the most widely used tax. All cities in the region used the property tax while only 26 used the payroll tax and 28 used the insurance tax.

However, the payroll tax was increasing in importance in most municipalities. The property tax share declined in 23 of the 35 places with data for both years; the insurance premium tax share declined in 17 of the 28 places that used the tax; and the payroll tax share increased in 17 of the 25 places that used the tax in 1998.

The relative roles of the three major tax instruments varied across the three Northern Kentucky counties but not dramatically. The payroll tax was the largest contributor to municipal revenues in each of the three counties in 1998 while property taxes also played an important, but declining, role in each.

Municipal revenue systems were most balanced in Campbell County, where revenue shares for the property tax, payroll tax, insurance premium tax and fees were 24 percent, 25 percent, 16 percent and 11 percent respectively. Boone County municipalities relied more heavily on property and payroll taxes (26 and 34 percent shares) and less on insurance taxes and fees (15 and 4 percent shares). Kenton County municipalities relied more heavily on payroll taxes (36 percent) and less on property and insurance taxes and fees (20, 13 and 9 percent).[11]

The middle panel of Chart 1 shows per capita revenues from the major revenue instruments in 1992, 1995 and 1998 for all of the municipalities combined. Per capita property and payroll taxes grew steadily with little variation over the two time periods shown on the chart (1992 – 1995 and 1995 – 1998). Insurance taxes grew more quickly between 1992 and 1995 than in the later period. State aid grew steadily but represented relatively small amounts of revenue throughout the period. Other revenues grew steadily throughout the period.

Boone County: Municipal revenues per capita were greater in 1998 and had grown more quickly in Boone County than in Campbell and Kenton. The full-county averages for Boone are dominated by Florence, which represents

Table 2: General Revenue Per Capita and Revenue Shares by Source - 1992 and 1998

Cty	Municipality	Population 1992	Population 1998	Total Revenues Per Capita 1992	Total Revenues Per Capita 1998	Revenue Shares (%): Property Tax 1992	Property Tax 1998	Payroll Tax 1992	Payroll Tax 1998	Insurance Tax 1992	Insurance Tax 1998	Fees 1992	Fees 1998	State Aid 1992	State Aid 1998	Other Revenue 1992	Other Revenue 1998
B	Florence	20,880	22,883	$295	$575	31 %	25 %	32 %	36 %	18 %	13 %	11 %	4 %	3 %	3 %	4 %	19 %
B	Union *	1,669	2,438	67	107	88	79	0	0	0	0	9	6	0	6	3	9
B	Walton	2,160	2,378	171	226	40	32	0	0	36	53	8	0	2	3	15	12
All Boone Cities		**24,709**	**27,698**	**266**	**504**	**32**	**26**	**31**	**34**	**19**	**15**	**11**	**4**	**3**	**3**	**5**	**18**
C	Alexandria	6,068	7,732	n.a.	222	n.a.	29	n.a.	19	n.a.	22	n.a.	0	n.a.	1	n.a.	29
C	Bellevue	6,790	6,558	203	315	28	25	14	21	15	13	18	18	4	2	21	20
C	California	111	92	167	629	15	5	0	0	70	69	6	4	9	21	0	2
C	Cold Spring	3,455	3,718	143	322	49	34	0	18	21	15	8	8	2	2	20	24
C	Crestview	579	498	115	171	25	25	0	0	9	29	16	0	7	6	42	39
C	Dayton	6,268	6,042	181	329	24	24	23	18	15	16	18	14	3	2	18	26
C	Fort Thomas	16,016	16,375	301	380	37	40	17	15	20	18	5	4	2	2	19	22
C	Highland Heights	5,281	6,236	148	248	48	37	0	10	22	19	21	2	1	3	9	28
C	Melbourne	760	533	93	320	19	16	0	0	59	50	3	3	0	6	20	25
C	Mentor	171	179	25	84	56	62	0	0	12	16	32	21	0	0	0	1
C	Newport	18,277	17,355	382	572	17	11	36	36	14	14	24	20	3	2	5	16
C	Silver Grove	995	1,160	189	192	25	16	16	15	12	15	20	10	9	0	18	43
C	Southgate	3,544	3,490	196	407	38	25	20	13	12	11	8	5	8	5	15	41
C	Wilder	1,353	2,306	611	616	9	18	57	58	13	9	7	5	3	2	12	8
C	Woodlawn	309	278	72	136	38	28	0	0	23	28	3	6	36	10	0	27
All Campbell Cities		**69,977**	**72,551**	**274**	**387**	**27**	**24**	**25**	**25**	**16**	**16**	**16**	**11**	**3**	**2**	**12**	**21**
K	Bromley	1,040	889	137	203	16	23	0	5	42	26	14	9	8	0	21	37
K	Covington	42,263	43,093	506	682	13	13	39	44	12	12	16	9	3	2	17	19
K	Crescent Springs	3,425	3,804	278	342	22	20	26	29	25	21	2	6	4	3	21	21
K	Crestview Hill	2,638	2,826	272	440	29	25	47	47	0	0	5	4	3	3	16	20
K	Edgewood	8,279	9,120	232	417	30	30	37	38	0	0	1	3	6	4	26	25
K	Elsmere	6,880	7,824	155	243	30	27	29	30	15	13	6	17	4	2	16	11
K	Erlanger	16,062	16,523	174	348	47	26	0	19	32	23	17	4	0	2	4	26
K	Fairview	126	149	80	135	32	68	0	0	0	0	0	0	10	8	58	24
K	Fort Mitchell	7,587	8,063	280	377	21	18	24	25	26	24	17	7	2	2	10	24
K	Fort Wright	6,617	5,915	189	311	30	28	23	22	15	13	12	19	2	2	18	17
K	Independence	11,178	14,031	109	167	43	33	37	38	0	0	7	8	2	2	11	20
K	Kenton Vale	151	155	89	n.a.	45	n.a.	0	n.a.	0	n.a.	0	n.a.	15	n.a.	40	n.a.
K	Lakeside Park	2,944	2,888	165	288	46	36	0	4	32	18	3	6	0	0	18	35
K	Latonia Lakes	409	346	64	69	26	43	0	0	0	0	31	36	18	0	25	21
K	Ludlow	4,515	4,436	121	219	22	16	27	29	26	31	11	11	3	5	10	9
K	Park Hills	3,229	3,040	179	254	46	38	10	13	25	17	4	6	3	2	11	24
K	Ryland Heights	872	817	18	50	56	34	0	0	0	0	11	17	23	36	10	12
K	Taylor Mill	6,257	6,749	160	330	22	17	19	36	18	16	12	5	2	2	26	24
K	Villa Hills	7,499	7,836	140	259	52	39	0	5	13	12	20	20	9	7	6	17
All Kenton Cities		**131,971**	**138,503**	**283**	**417**	**22**	**20**	**32**	**36**	**14**	**13**	**14**	**9**	**3**	**3**	**16**	**20**
Total		**226,657**	**238,752**	**$278**	**$418**	**24 %**	**22 %**	**30 %**	**32 %**	**15 %**	**14 %**	**14 %**	**9 %**	**3 %**	**3 %**	**14 %**	**20 %**

*: 1995 data shown in place of 1992 (not available).

nearly 85 percent of Boone County residents in incorporated cities. Revenue per capita nearly doubled in Florence between 1992 and 1998. The role of the payroll tax increased while the property and insurance taxes declined in importance. The two smaller municipalities in Boone County collect much less revenue per capita than Florence and depend much more heavily on the property tax (Union) or the insurance premiums tax (Walton).

The middle panels of Charts 2 – 5 show the time trends for the major revenue sources for Boone County municipalities. In Florence, payroll and property tax revenues were roughly equal in 1992 but payroll taxes increased much more quickly than property taxes, especially early in the period. Insurance taxes and aid were relatively flat during the period while other revenues grew significantly, especially in the early period. In Union, property tax growth dominates while the insurance tax was the only instrument to show significant growth in Walton.

Campbell County: Revenue growth was much more modest in the Campbell County municipalities. Overall, revenue per capita grew by 41 percent between 1992 and 1998—from $274 per capita to $387 per capita. The role of the property tax declined while the payroll and insurance tax shares were constant. This is reflected in the time trends in the middle panel of Chart 6—payroll and insurance tax revenues show similar upward trajectories while property tax growth lagged behind in the early period.

Individual municipalities in Campbell show a wide variety of patterns. For instance, the two municipalities where the payroll tax is the dominant tax instrument (Newport and Wilder) show very different patterns. In Newport, the role of the property tax declined sharply (from 17 percent of revenues in 1992 to 11 percent in 1998) as a result of slow growth in property tax base, a decrease in the property tax rate and significant growth in payroll tax base (Table 3 and the bottom panel of Chart 17). In Wilder, on the other hand, the property tax share increased significantly (from 9 percent to 18 percent) as a result growth in the base and a rate increase (Table 3 and the bottom panel of Chart 20).

The places where the insurance tax is the largest revenue source (California, Crestview and Melbourne) show similar variety. The property tax share declined sharply in California, declined by much less in Melbourne, and remained steady in Crestview. The variation again reflects the performance in property tax base—stagnant in California and growing more strongly in the Melbourne and Crestview (Table 3 and the bottom panels of Charts 9, 11, and 15).

Experiences in the remaining Campbell County municipalities varied widely as well. Payroll taxes were displacing property and insurance tax revenues in Bellevue, Cold Spring and Highland Heights; property taxes were displacing other revenue sources in Fort Thomas; and insurance tax increases were displacing other revenues in Woodlawn, Mentor and Silver Grove.

Kenton County: Revenue per capita grew by 47 percent between 1992 and 1998 in the Kenton County municipalities—from $283 per capita to $417 per capita. The role of payroll taxes

was increasing while the property and insurance tax shares declined.

The overall importance of the payroll tax in Kenton is reflected in the place-by-place data. Payroll tax increases contributed more to revenue growth than property taxes in 11 of the 15 Kenton municipalities with the payroll tax. This was due to relatively strong increases in payroll tax bases and to a greater than average propensity to increase payroll tax rates. Four of the 11 Kenton municipalities that used the tax in 1992 increased the tax rate between 1992 and 1998 (compared to just 1 of 8 in Campbell) and 4 other municipalities began using the tax for the first time during the period (compared to 2 in Campbell).

C. Tax Bases and Rates

More than one-half of municipal government revenues in Northern Kentucky are generated by property and payroll taxes. The strength of the local tax bases generating these revenues determines whether a given local government can generate the revenues needed to support high quality local public services with a tax rate that is competitive with its neighbors.

A place with lower than average local tax base per capita must either assess greater than average tax rates in order to supply an average level of local services, provide fewer (or lower quality) services at average tax rates or rely more heavily than average on other revenue sources (such as fees). Any of these decisions puts it at a disadvantage relative to its neighbors in the competition for residents and businesses.

This competition for residents and businesses need not be overt—in the form of tax breaks for new businesses for instance—for these differences to matter. A large empirical literature shows that residents and businesses pay attention to the taxes and services they receive when deciding where to locate (or whether to move).[12]

High tax rates in a municipality are important because they create the potential for vicious cycles of decline – the most mobile residents (which oftentimes means high income households) and businesses flea the municipality for lower taxes elsewhere, reducing the remaining tax base and forcing the locality to either reduce services or raise rates further, leading to another round of flight.

This potential is mitigated in an area like Northern Kentucky by the fact that older, higher density communities are likely to provide a more complete array of local public services, balancing the effects of the higher tax rates needed to support those services. As the region develops, however, many growing municipalities will find it necessary to expand local services (by making the transition from volunteer to professional fire services, for instance) and these differences are likely to narrow, leaving the underlying tax base and service environments as the primary determinants of a place's ability to maintain competitive tax rates.

Property Taxes: Table 3 and Maps 3 through 5 show that there is wide variation in Northern Kentucky in the property tax bases available to local governments, the tax rates applied to

those bases and in the rate at which the bases are growing.

Property tax base per capita (Table 3 and Map 3) varies by more than a factor of 10—from roughly $7,000 per capita (Ryland Heights) to $80,459 (Wilder). Even among the region's largest communities (communities with population greater than 7,500 in 2000) the range is significant—from $19,918 per capita in Newport to $65,134 in Villa Hills.

What this means is that an identical property tax rate would generate more than three times as much revenue per capita in Villa Hills as in Newport and more than 10 times as much revenue per capita in Wilder as in Ryland Heights.

Tax base variations of this magnitude inevitably translate into substantial differences in the tax rates that different places actually assess. (Table 3 and Map 4) In Northern Kentucky, municipal property tax rates varied by more than a factor of 4 in 1998—from as low as .09 percent (Taylor Mill) to as high as .47 percent (Dayton).

Comparing Maps 3 and 4 shows very clearly that higher than average tax rates are associated with lower than average tax bases—low tax-base places must "work harder" to generate the revenues needed to finance services. For instance, in 1998 the average property tax base in the 5 highest base places (Wilder, Crestview Hills, Villa Hills, Taylor Mill and Florence) was $67,580 per capita and the average municipal tax rate was .156 percent. This translated into $105 per capita in property tax revenues on average. The equivalent values for the 5 lowest tax base places (Ryland Heights, Ludlow, California, Latonia Lakes and Dayton) were $11,817 per capita for property tax base, a .307 percent average tax rate and $36 per capita in property tax revenues.

In other words, potential residents looking at houses of the same value could expect to get 3 times the services (from property taxes alone) for one-half the cost (in property taxes paid) in a high tax-base place compared to a low tax-base place. The low tax-base places would have to enjoy very significant advantages in other dimensions (access to jobs or amenities for instance) to offset differences of this magnitude when competing for residents or business activity.

Payroll Taxes: Table 2 and Map 5 show that potential payroll tax base and actual rates also vary a great deal. Jobs per 100 residents range from 0 in a few very small municipalities to nearly 1,400 in Crestview Hills.[13] The distribution is highly skewed with higher than average values in just 9 of the 37 municipalities —in the core in Newport, Covington, Woodlawn and Park Hills and in a few middle and outer suburbs such as Highland Heights, Lakeside Park, Crestview Hills, Elsmere and Florence.

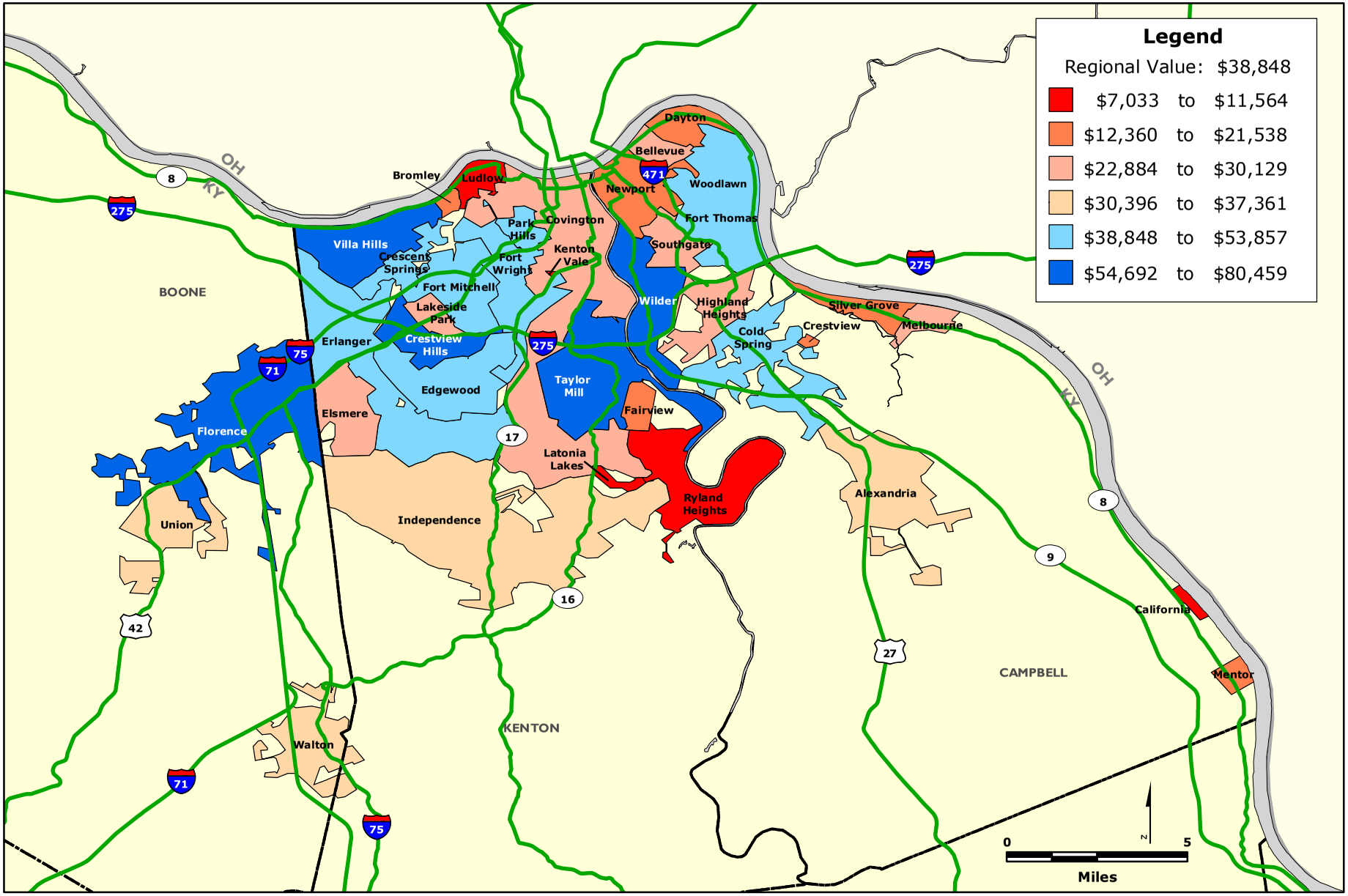
The job pattern has a mild equalizing effect on the distribution of total tax resources across the region. The municipalities with greater-than-average job concentrations tend to be in the lower half of the property tax-base distribution. This is true in 6 of the 9 places with greater-than-average jobs per 100 residents—Newport, Covington, Highland Heights, Lakeside Park, Elsmere and Woodlawn. In those places the extra payroll tax base at least

Table 3: Property and Income Tax Bases and Tax Rates

Cty	Municipality	Property Tax Base Per Capita 1992	Property Tax Base Per Capita 1998	Property Tax Base Per Capita Percentage Change	Property Tax Rate (%) 1992	Property Tax Rate (%) 1998	Property Tax Rate (%) Change	1998 Jobs per 100 Residents	Payroll Tax Rate (%) 1992	Payroll Tax Rate (%) 1998	Payroll Tax Rate (%) Change
B	Florence	37,228	59,198	59	0.25	0.24	-0.01	65	1.25	1.25	0
B	Union *	23,327	37,361	60	0.24	0.23	-0.02	5	0	0	0
B	Walton	21,396	36,476	70	0.32	0.20	-0.12	29	0	0	0
All Boone Cities		**34,744**	**55,326**	**59**	**0.25**	**0.24**	**-0.01**	**56**			
C	Alexandria	32,771	36,326	11	0.18	0.18	0.00	16	0	1.50	1.50
C	Bellevue	20,992	29,511	41	0.27	0.27	0.00	17	1.25	1.75	0.50
C	California	9,730	11,564	19	0.25	0.25	0.00	0	0	0	0
C	Cold Spring	29,084	46,271	59	0.24	0.24	0.00	33	0	0.50	0.50
C	Crestview	14,599	21,538	48	0.20	0.20	0.00	1	0	0	0
C	Dayton	8,831	16,603	88	0.49	0.47	-0.02	25	2.00	2.00	0
C	Fort Thomas	37,278	49,958	34	0.30	0.30	0.00	22	1.00	1.00	0
C	Highland Heights	20,900	30,396	45	0.34	0.30	-0.04	53	0	1.00	1.00
C	Melbourne	8,680	25,492	194	0.20	0.20	0.00	21	0	0	0
C	Mentor	5,637	20,690	267	0.25	0.25	0.00	0	0	0	0
C	Newport	14,364	19,918	39	0.45	0.31	-0.14	51	2.50	2.50	0
C	Silver Grove	24,112	20,357	-16	0.20	0.16	-0.04	14	1.50	1.50	0
C	Southgate	23,784	29,084	22	0.31	0.35	0.04	16	2.00	2.00	0
C	Wilder	44,342	80,459	81	0.12	0.14	0.02	19	1.50	1.50	0
C	Woodlawn	14,640	20,854	42	0.19	0.19	0.00	43	0	0	0
All Campbell Cities		**25,929**	**37,729**	**46**	**0.32**	**0.31**	**-0.01**	**31**			
K	Bromley	8,001	17,023	113	0.27	0.28	0.00	8	0	1.00	1.00
K	Covington	17,258	27,417	59	0.37	0.32	-0.05	44	2.50	2.50	0
K	Crescent Springs *	38,179	41,418	8	0.16	0.16	0.00	29	1.00	1.00	0
K	Crestview Hill	46,165	72,856	58	0.17	0.15	-0.02	139	1.00	1.00	0
K	Edgewood	34,535	54,692	58	0.20	0.23	0.03	27	0.75	1.00	0.25
K	Elsmere	17,671	30,129	71	0.26	0.22	-0.04	69	1.00	1.00	0
K	Erlanger	30,949	39,049	26	0.26	0.23	-0.03	21	0.00	1.00	1.00
K	Fairview	6,480	22,884	253	0.40	0.40	0.00	8	0	0	0
K	Fort Mitchell	37,837	46,047	22	0.15	0.15	0.00	28	1.00	1.00	0
K	Fort Wright	34,360	45,918	34	0.17	0.19	0.02	29	1.00	1.00	0
K	Independence	21,881	34,580	58	0.21	0.16	-0.05	16	1.00	1.25	0.25
K	Kenton Vale	18,754	n.a.	n.a.	0.21	0.21	0.00	0	0	0	0
K	Lakeside Park	21,487	29,033	35	0.36	0.36	0.00	38	0	1.00	1.00
K	Latonia Lakes	7,963	12,360	55	0.21	0.24	0.03	5	0	0	0
K	Ludlow	8,940	11,527	29	0.30	0.30	0.00	15	1.00	1.50	0.50
K	Park Hills	46,171	53,857	17	0.18	0.18	0.00	52	1.00	1.00	0
K	Ryland Heights	3,459	7,033	103	0.30	0.25	-0.05	5	0	0	0
K	Taylor Mill	36,103	60,253	67	0.10	0.09	-0.01	20	1.00	2.00	1.00
K	Villa Hills	38,601	65,134	69	0.19	0.16	-0.03	28	0	1.00	1.00
All Kenton Cities		**26,021**	**38,245**	**47**	**0.24**	**0.22**	**-0.02**	**35**			
Total		**26,262**	**38,848**	**48**	**0.25**	**0.23**	**-0.02**	**36**			

*: 1995 data shown in place of 1992 (not available).

Map 3
NORTHERN KENTUCKY:
Property Tax Base per Household, 1998



Data Source: Kentucky League of Cities.

partially offsets their disadvantages in property tax-base per capita. However, two of these municipalities, Newport and Covington, also assess the highest payroll tax rates in the three-county area—2.5 percent, or two and one-half times the rate assessed in most places that use the tax. This kind of differential is a potentially serious impediment to future job growth.

The payroll tax was clearly the tax instrument of choice in municipalities requiring greater revenues during the 1990's. In contrast with property tax rates, which declined in 15 of the 37 municipalities and increased in just 5 of 37 between 1992 and 1998, payroll tax rates declined nowhere and increased in 11 of the 26 places that used the tax in 1998—the tax was instituted for the first time in 6 of the 11. Interestingly, increasing payroll tax rates were not strongly associated with declining property tax rates. Property tax rates declined in only 45 percent (5 of 11) of the places that increased the payroll tax rate compared to 38 percent (10 of 26) of places that did not increase the payroll tax. Relief from insurance premiums taxes seems to have been a more common target of payroll tax increases. The insurance tax share declined in 82 percent (9 of 11) of the places that increased payroll tax rates, compared to just 42 percent (11 of 26) of other places. However, the general pattern in Table 2 is of payroll taxes displacing both property and insurance taxes.

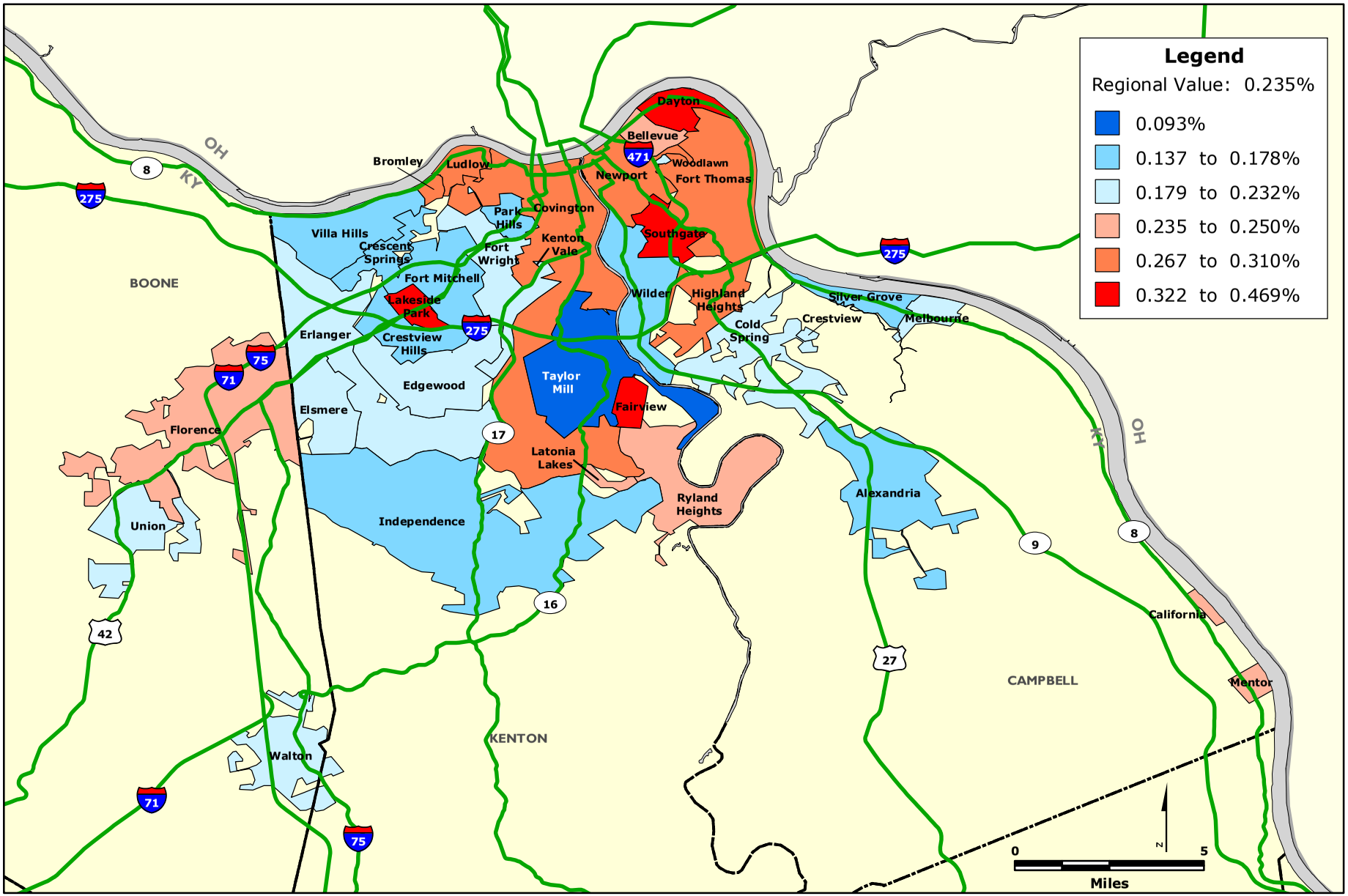
A shift from one tax base to another is not necessarily a bad thing. The local property tax, for instance, has often been criticized as a regressive tax – a uniform property tax is likely to claim a greater proportion of the income of low-income people than high-income people. However, payroll taxes are also likely to regressive, especially if they are assessed against only a portion of wage income (as they are in many places in Northern Kentucky). In addition, there are advantages in maintaining a diversified local tax system. Different taxes have different strengths – the property tax tends to be more stable than the payroll tax over the business cycle, for instance, while the payroll tax is more responsive to growth in the economy.

The local tax system in Northern Kentucky was reasonably balanced in 1998. If the shift toward the payroll tax continues or accelerates, this will not be so in the future.

Payroll taxes are also likely to distort the local economy in important ways. An earnings tax like Kentucky's that is assessed according to where people work has the apparent advantage (from the point of view of residents of the community assessing the tax) of taxing non-resident commuters thereby expanding the tax base and requiring all consumers of local services to contribute to financing them. This creates a great incentive for local governments to compete for payroll tax base.

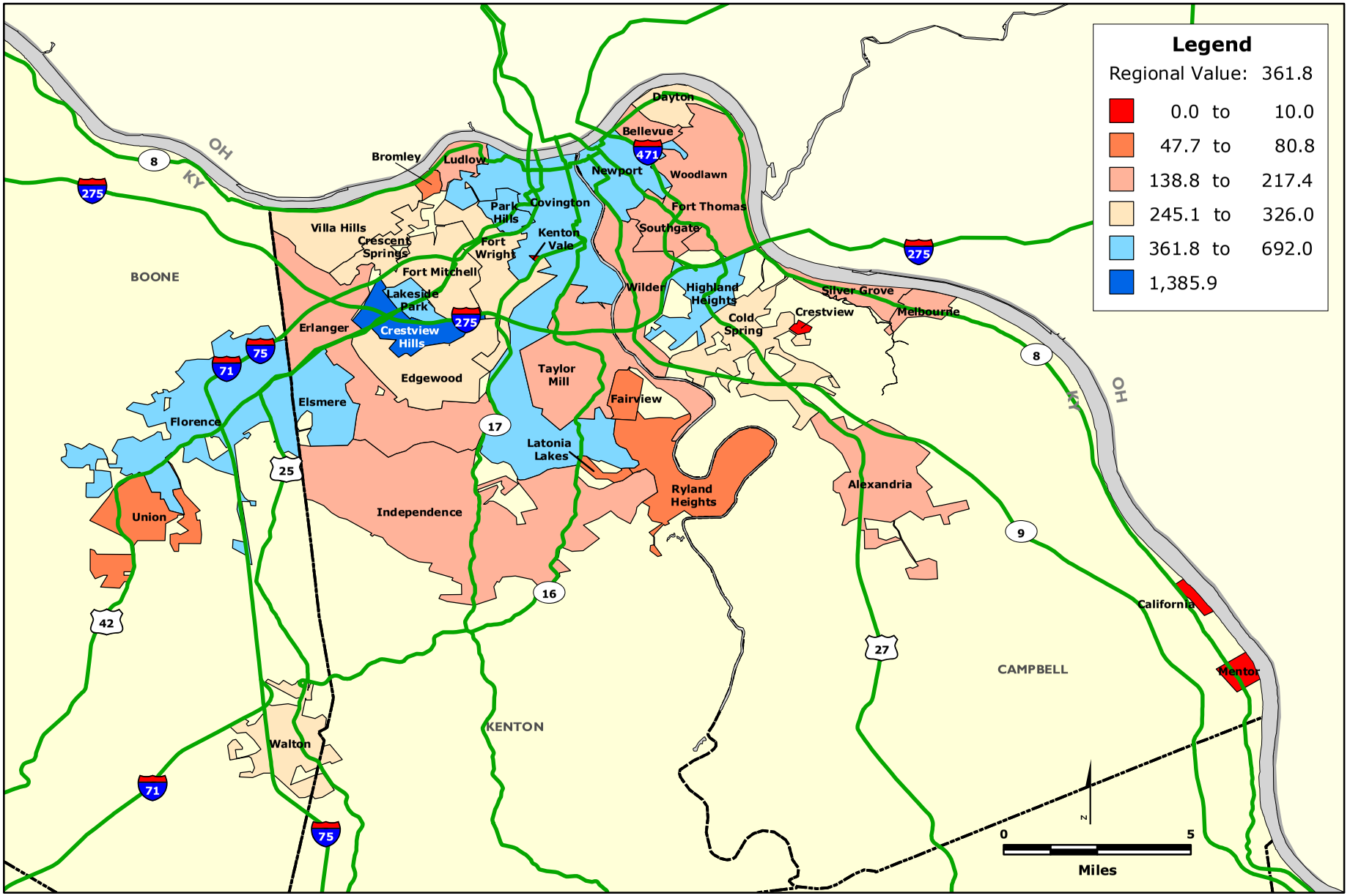
This competition is costly in at least four ways. First, from the point of view of the three-county area as a whole, it is wasteful of public resources. Public sector time, effort, and money is likely to be expended to affect the location of businesses that would have located somewhere in the three-county area anyway. Second, the competition can contribute to vicious cycles of decline. If a business relocates from one municipality to another, the loser must

Map 4
NORTHERN KENTUCKY:
Property Tax Rate by Municipality, 1998



Data Source: Kentucky League of Cities.

Map 5
NORTHERN KENTUCKY:
Jobs per 100 Persons by Municipality, 1998



Data Source: Spatial Insights.

either raise tax rates to maintain revenues or decrease the amount or quality of services, diminishing its attractiveness to business in the next round of competition. Third, such uncoordinated competition often makes the task of providing regional infrastructure more expensive than necessary. Finally, the payroll tax (whether in combination with a property tax or not) increases the fiscal benefits to localities of business development compared to residential development. This can lead to inadequate provision of housing, especially affordable housing.

Ironically, in the long run the payroll tax is also unlikely to provide all of the fiscal benefits that it promises. This is particularly true in a state like Kentucky where large proportions of land and population are in unincorporated areas.

While a local payroll tax appears to be taxing resident workers and non-resident commuters, it is actually taxing local businesses. Businesses in a high payroll tax municipality are likely to bear the brunt of the tax in the form of wage premiums paid to workers. Workers in professions with employment opportunities throughout the region will opt for a job in a high payroll tax place only if they are compensated for the extra cost in some way. This generally means higher wages.

Businesses therefore have a strong incentive to avoid payroll taxes when making location decisions. This should be particularly true of labor-intensive businesses with high wages—the Holy Grail for local economic development planners. In Northern Kentucky, the surest way for such a business to avoid the extra costs associated with higher than average payroll taxes is to locate in unincorporated areas, where where lower than average County government payroll tax rates apply.[14] In other words, the tax pushes businesses to locate in the parts of the region least likely to have the necessary supporting infrastructure already in place.

III. FINANCING LOCAL EXPENDITURES

This section examines how municipal governments in Northern Kentucky financed expenditure increases in the 1990's, the distribution of fiscal stress in the region and how stress relates to a set of easily measured characteristics of the local service environment.

A. Revenue Sources

Table 4 and Map 6 show how municipalities financed the expenditure growth that occurred between 1992 and 1998. The least painful way to finance new expenditure needs is with increases in tax bases. This is the only method that requires no increase in the "price" (tax rates, fees or other charges) that residents pay for services.

However, only half of the revenues needed for new expenditures came from growth in the primary tax bases (property and payroll) in the Northern Kentucky region as a whole. An additional 12 percent came from insurance tax increases, some of which represents base increases. Just 2 percent came from increases in state aid.

This left 33 percent of expenditure increases to be financed from increases in tax rates and other revenue sources. Tax rate increases financed just 4 percent of this—8 percent from payroll tax rate increases and -4 percent from property tax rate decreases—which implies that many municipalities in the region were scrambling to find ways to expand revenues from non-tax sources.

Boone County: Expenditures per capita grew more slowly (42 percent) in the Boone County municipalities than in the other counties—a stark contrast with the revenue data. The relatively modest rate of growth in expenditures combined with relatively robust tax bases meant that Boone County municipalities were able to finance all of their expenditure increase from new revenues generated by tax-base increases.

In Florence, property tax-base increases were great enough to finance 46 percent of new expenditures while improvement in the payroll tax base contributed another 93 percent. In other words, tax base increases alone were great enough to finance more than 100 percent of Florence's expenditure increases leaving extra funds for relief in other revenue instruments. The two smaller Boone municipalities show a similar pattern except that all of the tax base improvements come from the property tax base—neither place uses the payroll tax.

Surprisingly, Boone County municipalities were able to finance a greater portion of expenditure increases from state aid increases than those in either of the other two counties, clearly implying that state aid changes in the period were not targeted toward places experiencing fiscal stress.

Campbell County: Expenditures grew relatively slowly (46 percent) in Campbell County municipalities as well. However, tax base growth was much less robust than in Boone County. As a result, tax base increases financed only about one-half (48 percent) of

Table 4: Sources of Revenues to Finance Expenditure Increases from 1992 to 1998

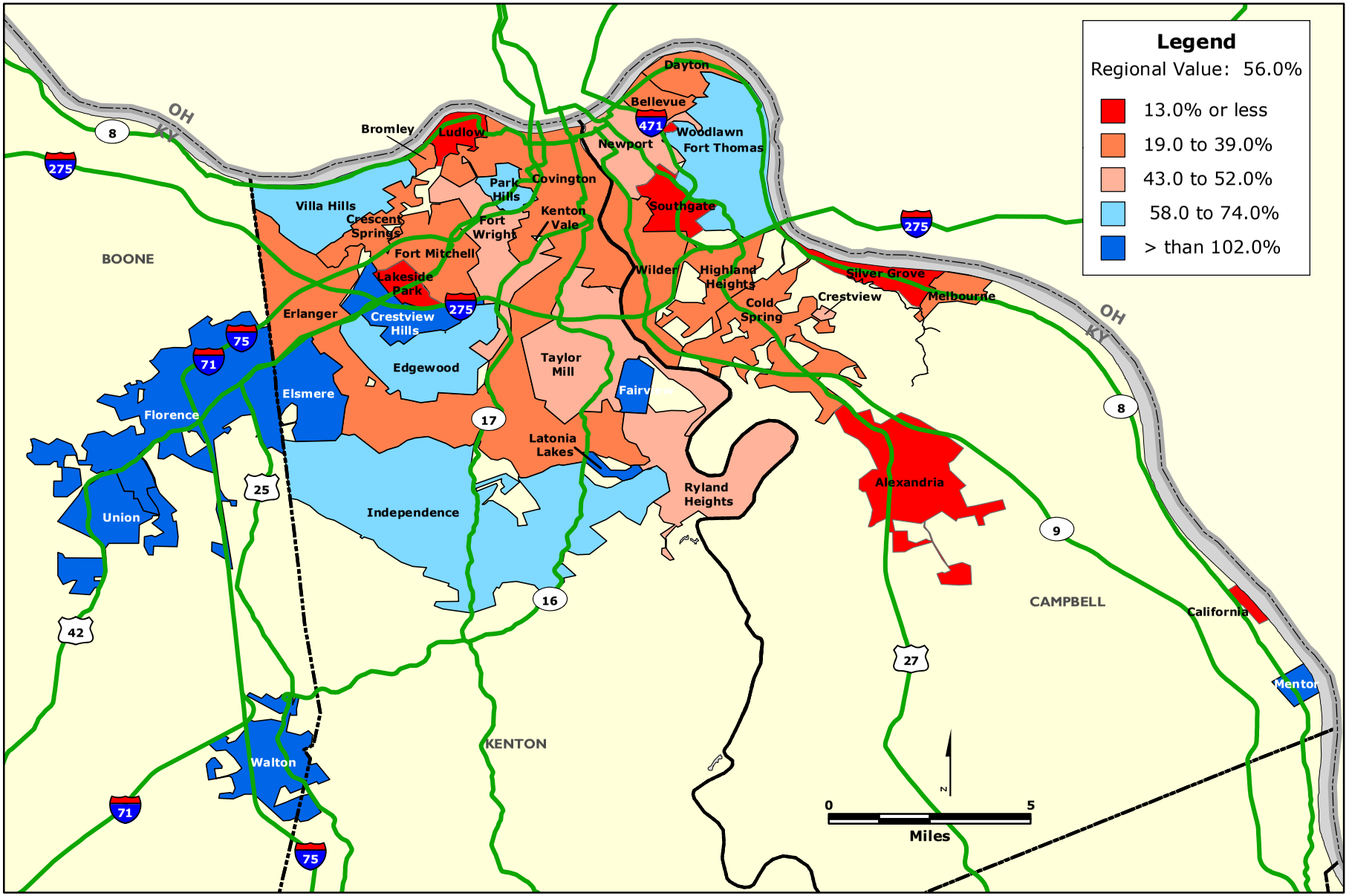
			Percentage of Expenditure Increase Financed by:								
			Property Tax		Payroll Tax						
Cty	Municipality	1992-98 % Change in Expenditure Per Capita	Tax Base Change	Tax Rate Change	Tax Base Change	Tax Rate Change	Total From Tax Base Changes	Total From Tax Rate Changes	Insurance Tax Change	State Aid Change	Remainder
	Boone County										
B	Florence	44	46	-3	93	0	139	-3	19	7	-62
B	Union	49 *	121	-32	0	0	121	-32	0	24	-13
B	Walton	24	126	-117	0	0	126	-117	156	5	-70
	Boone	**42**	**49**	**-7**	**89**	**0**	**138**	**-7**	**23**	**8**	**-61**
	Campbell County										
C	Bellevue	57	20	0	16	17	37	17	9	-1	38
C	California	886	1	0	0	0	1	0	48	17	34
C	Cold Spring	81	31	-1	0	43	31	42	14	2	11
C	Crestview	33	49	-2	0	0	49	-2	139	10	-95
C	Dayton	92	23	-2	11	0	34	-2	15	1	52
C	Fort Thomas	22	63	2	11	0	74	2	11	3	10
C	Highland Heights	130	19	-7	0	15	19	8	9	4	61
C	Melbourne	310	21	0	0	0	21	0	65	12	2
C	Mentor	67	144	0	0	0	144	0	40	0	-84
C	Newport	42	14	-16	38	0	52	-16	16	0	48
C	Silver Grove	39	-16	-19	-1	0	-17	-19	13	-36	158
C	Southgate	-2	0	0	0	0	0	0	0	0	100
C	Wilder	30	24	8	5	0	30	8	-13	-4	79
C	Woodlawn	335	13	0	0	0	13	0	25	-14	75
	Campbell	**46**	**28**	**-13**	**21**	**9**	**48**	**-4**	**17**	**1**	**37**
	Kenton County										

Table 4: Sources of Revenues to Finance Expenditure Increases from 1992 to 1998

			Percentage of Expenditure Increase Financed by:								
			Property Tax		Payroll Tax						
Cty	Municipality	1992-98 % Change in Expenditure Per Capita	Tax Base Change	Tax Rate Change	Tax Base Change	Tax Rate Change	Total From Tax Base Changes	Total From Tax Rate Changes	Insurance Tax Change	State Aid Change	Remainder
K	Bromley	82	29	1	0	12	29	13	-6	-13	77
K	Covington	93	10	-3	27	0	36	-3	6	0	62
K	Crescent Springs	37 *	6	1	32	0	39	1	4	0	57
K	Crestview Hill	55	37	-12	65	0	102	-12	0	6	4
K	Edgewood	65	41	18	33	40	73	58	0	3	-35
K	Elsmere	41	58	-23	49	0	107	-23	14	-2	5
K	Erlanger	30	36	-19	0	116	36	96	40	10	-82
K	Fairview	51	172	0	0	0	172	0	0	6	-78
K	Fort Mitchell	73	10	-1	21	0	31	-1	15	0	55
K	Fort Wright	53	21	9	26	0	47	9	14	2	27
K	Independence	82	42	-28	16	20	59	-8	0	1	49
K	Lakeside Park	182	11	1	0	5	11	6	0	0	84
K	Latonia Lakes	14	122	53	0	0	122	53	0	-152	77
K	Ludlow	220	3	0	4	9	7	9	14	3	67
K	Park Hills	28	28	-1	30	0	58	-1	-4	2	45
K	Ryland Heights	197	43	-14	0	0	43	-14	0	57	14
K	Taylor Mill	74	22	-4	28	55	50	51	22	3	-25
K	Villa Hills	70	59	-25	0	16	59	-9	15	6	29
	Kenton	**78**	**11**	**-4**	**24**	**10**	**35**	**6**	**7**	**1**	**50**
	Total	**63**	**21**	**-4**	**29**	**8**	**50**	**4**	**12**	**2**	**33**

*: Union and Crescent Springs data are for 1995 and 1998.
Kenton Vale and Alexandria data unavailable.

Map 6
NORTHERN KENTUCKY:
Percent of 1993-1998 Expenditure Increase Financed by Tax Base Increase by Municipality



Data Source: Kentucky League of Cities and MARC.

expenditure increases in Campbell. The county's municipalities had to look elsewhere for the additional revenues.

These revenues did not come from tax rate increases. Property tax rates declined on average in the county, reducing revenues by an amount equivalent to 13 percent of the overall expenditure increase. Payroll tax rates increased in three municipalities but the revenues generated by these increases were less in total (countywide) than those lost from the property tax rate declines. Insurance tax increases filled some of the gap but, in the end, increases in non-tax revenue financed more than a third (37 percent) of the new expenditures in Campbell County municipalities.

In contrast with Boone County, only one Campbell County jurisdiction (Mentor) was able to finance all of its new expenditures from tax base improvements alone. In 10 or the 14 municipalities shown in Table 4, less than 40 percent of new expenditures were financed by tax-base improvements. This group includes all of the municipalities that raised payroll tax rates and four of the five municipalities where a tax rate increase of some sort was used to finance some portion of new expenditures. Not surprisingly, poor growth in tax bases was associated with greater pressure to increase tax rates.

Overall, tax-base improvements were the greatest contributors to new revenues in only 3 of the 14 municipalities (Fort Thomas, Mentor and Newport). One place (Cold Spring) relied most heavily on tax rate increases; in 3 the insurance tax was the greatest contributor; and in 7, it was non-tax revenues.

Kenton County: Among the 3 counties, Kenton County municipalities showed the greatest increase in expenditures (78 percent), financed the smallest proportion (35 percent) of those new expenditures from tax-base improvements and relied most heavily on tax rate increases (6 percent) and non-tax revenues (50 percent).

However, there was a great deal of variation within the county. The two largest municipalities (Covington and Erlanger) were able to finance only 36 percent of new expenditures from tax-base improvements and relied very heavily on either tax rate increases (Erlanger) or non-tax sources (Covington). Other places with similar patterns included Bromley, Crescent Springs, Fort Mitchell, Lakeside Park and Ludlow. As a group, these places represented about 60 percent of the county's population in incorporated areas.

Another group of places showed relatively robust growth in tax bases (compared to expenditure increases). Four municipalities (Crestview Hill, Elsmere, Fairview and Latonia Lakes) were able to finance more than 100 percent of expenditure increases from this source and another 4 (Edgewood, Independence, Park Hills and Villa Hills) were above 50 percent. However, these places represented just a third of the population in incorporated areas.

Tax-base improvements and tax rate changes were related in Kenton (although not as strongly as in Campbell). Among the 7 places where tax-base increases financed less than 40 percent of expenditures increases, 5 increased at least 1 tax rate—3 increased

both property and payroll tax rates and 2 increased just the payroll tax rate.

B. Sources of Local Fiscal Stress

A wide variety of local demographic and fiscal characteristics contribute to local fiscal stress. For this work, 5 demographic and 8 fiscal characteristics were selected as indicators of stress. The demographic indicators include population decline, rapid population growth, older-than-average housing stock, higher-than-average poverty and increasing poverty. These characteristics were chosen because they show up frequently in discussions and empirical analyses of fiscal stress.[15]

A decline in population tends to increase per person costs of long-lived public goods like infrastructure (streets and sewers) because, in the short run the number of users declines while the supply is fixed. Rapid growth, on the other hand, is likely to increase current costs because it is difficult for local governments to spread the costs of new infrastructure over the full life-time of long-lived assets, resulting in greater costs for current residents (compared to future residents).

Poverty and older housing stocks result in higher costs per person of providing a wide range of local public goods as well. For instance, poverty populations are more likely to be victimized by crime and to resort to crime for a livelihood. The costs of limiting crime to a given level are therefore likely to be higher in high poverty environments. Similarly, older housing stocks are likely to be associated with aging, costly to maintain, infrastructure.

The fiscal indicators chosen for the analysis include the change in expenditures from 1992 to 1998, 1998 property tax base per capita, change in property tax base per capita from 1992 to 1998, 1998 property tax rate, change in property tax rate from 1992 to 1998, jobs per resident in 2000, 1998 payroll tax rate, and change in payroll tax rate from 1992 to 1998.

A greater than average increase in expenditures per capita is used as an overall indicator of increasing public service needs or costs. Lower than average tax base per capita (jobs per resident is used as a proxy for income tax base) and/or higher than average tax rates are indicators of greater than average pressure on local tax bases. Lower than average increases in tax base per capita and/or increasing tax rates are indicators of increasing strain and potential future stress.

Table 5 shows how the municipalities in the three-county area fare in these 13 dimensions. The average municipality shows stress in 6 of the 13 dimensions. Four places show high cost characteristics in 9 or 10 of the measures; 13 qualify by 7 or 8 measures; 10 by 5 or 6 characteristics; 7 by 3 or 4; and 2 by 1 or 2.

Table 6 shows the characteristics of the communities in these four groups and Map 7 shows the geographic distribution across the region.

The four places with the greatest number of stress indicators—Bellevue, Bromley, Dayton and Ludlow—are all in the core of the region along the river. They are home to 6 percent of the population in incorporated areas. Poverty rates for this

Table 5: Indicators of Fiscal Stress

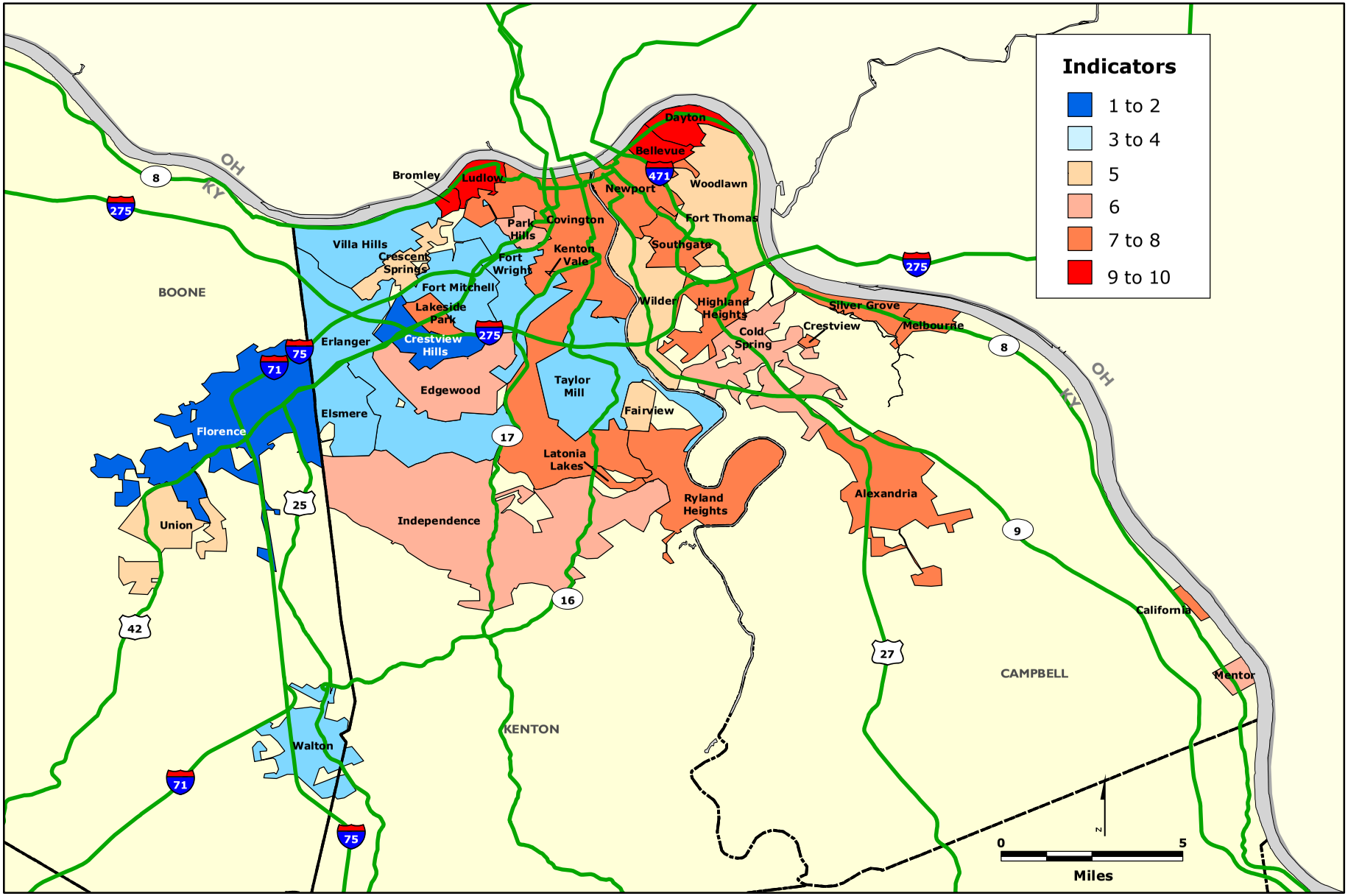
	Demographic Indicators					Fiscal Indicators								
Municipality	Poverty > Average	Increasing Poverty	Population Decline	Housing Age > Average	Population Growth > 10%	Expenditure Change > Average	Property Tax Base < Average	Property Tax Base Change < Average	Property Tax Rate > Average	Increasing Property Tax Rate	Jobs per Capita < Average	Payroll Tax Rate > Average	Increasing Payroll Tax Rate	Total
Bellevue	X	X	X	X			X	X	X		X	X	X	10
Bromley	X	X	X	X		X	X		X	X	X		X	10
Dayton	X	X	X	X		X	X		X		X	X		9
Ludlow	X	X	X	X		X	X	X	X		X			9
Newport	X	X	X	X			X	X	X			X		8
Southgate		X	X				X	X	X	X	X	X		8
Lakeside Park	X	X	X			X	X	X	X	X				8
Latonia Lakes	X		X	X			X		X	X	X		X	8
Alexandria		X			X	X	X	X			X		X	7
California		X	X			X	X	X	X		X			7
Crestview	X	X	X	X			X	X			X			7
Highland Heights	X	X			X	X	X	X	X					7
Melbourne	X	X	X	X		X	X				X			7
Silver Grove	X	X		X	X		X	X			X			7
Woodlawn	X	X	X	X		X	X	X						7
Covington	X	X		X		X	X		X			X		7
Ryland Heights	X		X	X		X	X		X		X			7
Cold Spring	X	X				X			X		X		X	6
Mentor		X		X		X	X		X		X			6
Edgewood		X			X	X				X	X		X	6
Independence		X			X	X	X				X		X	6
Park Hills	X	X	X	X				X					X	6
Union		X			X	X	X				X			5
Fort Thomas				X				X	X	X	X			5
Wilder	X	X			X					X	X			5
Crescent Springs					X	X		X		X	X			5
Fairview				X	X		X		X		X			5
Fort Wright			X					X		X	X			4
Taylor Mill	X	X				X					X			4
Villa Hills		X				X					X	X		4
Walton					X		X				X			3
Elsmere	X				X		X							3
Erlanger		X						X			X			3
Fort Mitchell						X		X			X			3
Crestview Hill	X	X												2
Florence									X					1
Total	20	26	15	16	11	20	23	17	17	9	27	6	8	6

Table 6: Selected Characteristics of Municipalities Grouped by the Number of Stress Indicators

Number of Stress Indicators	Number of Municipalities	Population	Population Share	Free and Reduced Lunch Eligibility 1993	Free and Reduced Lunch Eligibility 2000	Population Growth 1992-98	Expenditure Change 1992-98
9 or 10	4	13,834	6 %	58 %	64 %	-5 %	61 %
7 or 8	13	86,550	36	39	53	2	181
5 or 6	10	56,555	24	19	25	13	78
3 or 4	7	56,105	23	28	28	4	70
1 or 2	2	25,710	11	24	35	9	49
Total	36	238,752	100	32	40	5	65

Number of Stress Indicators	Property Tax Base per Capita 1992	Property Tax Base per Capita 1998	Change in Property Tax Base 1992-98	Property Tax Rate 1992	Property Tax Rate 1998	Payroll Tax Rate 1992	Payroll Tax Rate 1998
9 or 10	14,439	22,643	57 %	0.32 %	0.33 %	0.8 %	1.4 %
7 or 8	19,468	27,746	43	0.33	0.29	0.8	1.0
5 or 6	26,504	43,613	65	0.25	0.23	0.5	0.6
3 or 4	31,477	45,153	43	0.20	0.18	0.9	0.9
1 or 2	38,230	60,700	59	0.24	0.23	1.1	1.1
Total	25,509	38,848	52	0.26	0.23	0.8	0.9

Map 7
NORTHERN KENTUCKY:
Number of Stress Indicators by Municipality



Data Source: Kentucky League of Cities.

group are much above the regional average (64 percent compared to 40) and growing; their populations declined by 5 percent; property tax base was just 58 percent of the average; and their tax rates were significantly greater than the rest of the region. These places are very clearly poorly positioned to compete with the rest of the region for businesses and households.

The second group—places with 7 or 8 stress indicators—fare a bit better but also show strong signs of stress. These places are a combination of core communities (Covington, Newport, Woodlawn and Southgate), middle (Lakeside Park, Crestview, Highland Heights, Melbourne and Silver Grove) and outer suburbs (Latonia Lakes, Alexandria, California and Ryland Heights). Representing more than a third of the population, their poverty rates are high and increasing; property tax base is just 71 percent of the average and growing more slowly than average; and their tax rates are higher than average. Although not as stressed as the first category, the municipalities in this group are clearly disadvantaged.

The most distinctive characteristic of the third group—places with 5 or 6 indicators—is the population growth rate. At 13 percent, it is more than twice the average for incorporated areas. In most other dimensions, this group is near the regional norms. Coping with growth is clearly the primary concern in these places.

The fourth category is similar to the third in many ways, except that population is growing much more slowly. This group is composed primarily of mature, relatively stable, middle-ring suburbs. The principal sign of stress in these places is a lower-than-average rate of growth in property tax base.

The last group, including just two municipalities (Crestview Hills and Florence), contains about a tenth of the population in incorporated areas. The most distinctive feature of these places is the strength of the tax bases. Property tax base per capita was more than 50 percent greater than the average and growing more quickly than average in this group. Although the group compares well with the rest of the region in most dimensions, even these places show some signs of stress—a sharp increase in poverty between 1993 and 2000, population growth great enough to create significant infrastructure costs and greater than average payroll tax rates.

Table 7 shows how well the summary measure of stress (the scores from Table 5) correlates with the stress measure from Table 4 (the percentage of expenditure increases financed by tax-base increases). If the 13 measures used in the analysis represent reasonable indicators of the potential for fiscal stress, then the places meeting more of the criteria should show greater degrees of stress in the mid-1990s. This is in fact the case. The pattern is clear—places with more stress characteristics were generally less able to finance expenditure increases with increases in their tax-base.[16] Further, a large proportion of the region's population resides in communities showing clear signs of stress. More than 40 percent of the population in incorporated areas lived in municipalities showing 7 or more indicators of stress. These places clearly faced the most difficult tradeoffs

Table 7: Stress Indicators and Expenditure Increases Financed by Tax Base Increases

Municipality	Number of Stress Indicators	Percentage of 1992-98 Expenditure Increase Financed by Property and Payroll Tax Base Increases	Weighted Average Percentage of Expenditure Increase Financed by Tax Base Increases
Bellevue	10	37	
Bromley	10	29	
Dayton	9	34	**28**
Ludlow	9	7	
Newport	8	52	
Southgate	8	0	
Lakeside Park	8	11	
Latonia Lakes	8	n.a.	
Alexandria	7	0	
California	7	1	
Crestview	7	49	**32**
Highland Heights	7	19	
Melbourne	7	21	
Silver Grove	7	-17	
Woodlawn	7	13	
Covington	7	36	
Ryland Heights	7	43	
Cold Spring	6	31	
Mentor	6	144	
Edgewood	6	73	
Independence	6	59	
Park Hills	6	58	**65**
Union	5	121	
Fort Thomas	5	74	
Wilder	5	30	
Crescent Springs	5	39	
Fairview	5	172	
Fort Wright	4	47	
Taylor Mill	4	50	
Villa Hills	4	59	
Walton	3	126	
Elsmere	3	107	**81**
Erlanger	3	36	
Fort Mitchell	3	31	
Crestview Hill	2	102	
Florence	1	139	
Total	**6**	**56**	**56**

when balancing increasing service needs against the costs of providing for those needs. Nor is the rest of the region immune from stress. Each of the less-stressed categories also showed one or more characteristics with the potential to strain local resources—rapid population growth in the third category; relatively slow growth in tax base in the fourth; and sharply increasing poverty in the fifth.

If the objective of fiscal reforms is to enhance the ability of the region's municipalities to finance needed services at reasonable tax rates, then the characteristics shown in Table 5 provide a reasonable starting point in designing fiscal assistance programs.

Current state aid patterns clearly do not reflect the patterns of stress shown in Tables 5 through 7. State aid per capita in 1998 was only a minor contributor to revenues in the vast majority of places and the distribution of the meager aid that found its way to the region was uncorrelated with property tax base per capita, poverty, the measure of fiscal stress used in this work (percentage of expenditure increases financed by tax-base increases) or the number of stress indicators shown in Tables 5 and 6.[17]

IV. FISCAL PROSPECTS IN NORTHERN KENTUCKY

Several factors play a role in the extent to which local governments in Northern Kentucky can achieve or maintain fiscal stability. Primary among them are: (1) access to an adequate and balanced local revenue system and (2) the distribution, composition, and management of growth in the region. The potential solutions to problems in each of these dimensions highlight the advantages of cooperation among all of the players in the region.

Access to an adequate and balanced local tax system is a fundamental requirement for fiscal stability. There are clear indications of problems with the current system in Northern Kentucky – in particular, local expenditure needs appear to be outstripping the revenue system. State law limits the ability of municipalities to raise revenues in several important ways. The limitation on property tax revenues is particularly important. Property tax revenues are limited to a four percent per year rate of increase, excluding increases from new development. Regardless of the rationale for this law (limiting the impact of property tax payments on fixed income households, for instance), such a limitation is likely to increase reliance on other local taxes. In Kentucky, this usually means the payroll tax.

This shift is clearly occurring in Northern Kentucky. The share of local general revenue coming from the property tax declined in nearly every municipality in the region in the 1990's while the roles of payroll taxes and non-tax revenues increased. As noted above, the payroll tax, as it is structured in Kentucky, has some serious drawbacks. Most of its problems are a direct function of the fact that the tax is assessed based on where people work rather than where they live. This is the characteristic of the tax that shifts the tax from workers to employers, leading in turn to all of the other drawbacks spelled out in Section II. C.

A way to avoid all of these disadvantages without abandoning a revenue source as robust as the payroll tax is to regionalize the tax by assessing a single rate region-wide and distributing the revenues to the counties and municipalities on some basis other than job location. Distributions could be based on a variety of local characteristics such as current tax base, population growth or decline, infrastructure needs, or social stress. These characteristics need not be limited to those employed in the analysis of fiscal stress for this work but the analysis in Section II suggests that they represent a good starting point for discussion.

Such a program could dramatically reduce the incentives for inter-local competition for tax base, reduce the extent to which businesses choose locations for reasons other than the economic merits, and reduce inequality in the ability of municipalities to raise revenues.

The political and institutional barriers to a policy shift like this are significant, of course, but there are ways to minimize these kinds of objections. Administering the tax at the County level could minimize the administrative costs for instance. Similarly, allowing municipalities to piggyback an additional (but limited) local tax onto the

regional tax could reduce objections based on a perceived reduction in local autonomy.

State aid systems provide another means for reducing inter-local fiscal disparities and diversifying the local revenue stream. Kentucky provides very minimal support to local governments. In the late 1990's, the state ranked 40th out of the 50 states in state aid as a percentage of municipal general expenditures.[18] And, as noted above, the little aid that does reach the region is not particularly well targeted—state aid per capita in 1998 was uncorrelated with property tax base per capita, poverty, percentage of expenditure increases financed by tax-base increases or the number of stress indicators shown in Tables 5 through 7. Several states (including Massachusetts, Michigan and Minnesota among others) provide models of aid systems designed, at least in part, to reduce local fiscal disparities.

The distribution, composition, and management of growth have very significant effects on the fiscal condition of localities. Growth patterns in Northern Kentucky were very unbalanced in the 1990's. Roughly 85 percent of population growth in the three-county area occurred in Boone County, 90 percent of overall growth occurred in unincorporated areas, and more than 90 percent of growth in unincorporated areas was in Boone County. Similarly, 65 percent of job growth in the 1990's occurred in Boone County. Growth in the incorporated portions of the region was also highly unbalanced. Population is moving out of the inner, more densely settled municipalities of the three-county area and into less densely settled municipalities further from the core of the region.

Unbalanced growth presents problems not only for the individual places that are growing or declining; it also challenges the entire three-county area to find ways to coordinate planning and service provision in order to manage the regional costs of growth and decline.

The incorporated/unincorporated growth differential clearly implies that, as in most regions in the country, people in Northern Kentucky are leaving areas where service and physical infrastructures already exist for places where they do not. Even when it is occurring in incorporated areas population growth means that places must often reorganize the way that they provide services. Some public safety functions, like fire protection for instance, must shift from volunteer to professional provision. Or transportation and sanitation infrastructure must be upgraded.

These transitions are expensive. In some cases, extra costs could be avoided if planning occurred at larger-than-local scales. The current system of land use planning and local finance in Kentucky creates overwhelming incentives for fiscal issues to dominate land use planning. Rather than encouraging localities to coordinate development plans (in order to minimize infrastructure needs for instance), the system encourages localities to compete for revenue-generating land uses – in the Northern Kentucky context, this means payroll tax generating land uses in most cases. This makes it very difficult for municipalities to cooperate or for

counties or regional bodies to implement regional strategies in areas such as housing, transportation, or reinvestment in declining areas. There is a clear need for greater cooperation among local areas in the three-county region.

Appendix 1: City Classifications

The classification system for Kentucky cities is based on population: 1st Class Cities - 100,000 or more; 2nd Class Cities - 20,000 to 99,999; 3rd Class Cities - 8,000 to 19,999; 4th Class Cities - 3,000 to 7,999; 5th Class Cities - 1,000 to 2,999; 6th Class Cities - 999 or less. However, the classifications do not change automatically as population changes—cities must request the change. Based on 2000 population, the cities of Newport, Florence, Fort Thomas, Edgewood, Alexandria, Elsmere, Fort Mitchell, Park Hills, Crestview Hills, Wilder and Crescent Springs are classified incorrectly.

City	Class	Population	County
Covington	2	43,370	Kenton
Newport	2	17,048	Campbell
Florence	3	23,551	Boone
Erlanger	3	16,676	Kenton
Independence	3	14,982	Kenton
Fort Thomas	4	16,495	Campbell
Edgewood	4	9,400	Kenton
Alexandria	4	8,286	Campbell
Elsmere	4	8,139	Kenton
Fort Mitchell	4	8,089	Kenton
Villa Hills	4	7,948	Kenton
Taylor Mill	4	6,913	Kenton
Highland Heights	4	6,554	Campbell
Bellevue	4	6,480	Campbell
Dayton	4	5,966	Campbell
Fort Wright	4	5,681	Kenton
Ludlow	4	4,409	Kenton
Southgate	4	3,472	Campbell
Park Hills	4	2,977	Kenton
Crestview Hills	4	2,889	Kenton
Wilder	4	2,624	Campbell
Union	5	2,893	Boone
Lakeside Park	5	2,869	Kenton
Cold Spring	5	2,588	Campbell
Walton	5	2,450	Boone
Silver Grove	5	1,215	Campbell
Crescent Springs	6	3,931	Kenton
Bromley	6	838	Kenton
Ryland Heights	6	799	Kenton
Crestview	6	471	Campbell
Melbourne	6	457	Campbell
Latonia Lakes	6	325	Kenton
Woodlawn	6	268	Campbell
Mentor	6	181	Campbell

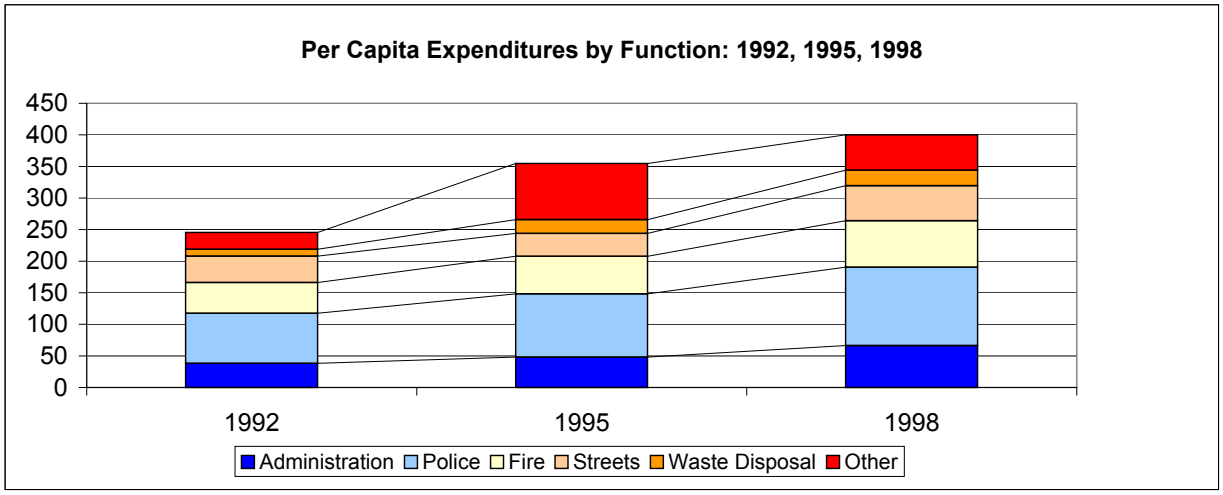
City	Class	Population	County
Fairview	6	156	Kenton
Kenton Vale	6	156	Kenton
California	6	86	Campbell

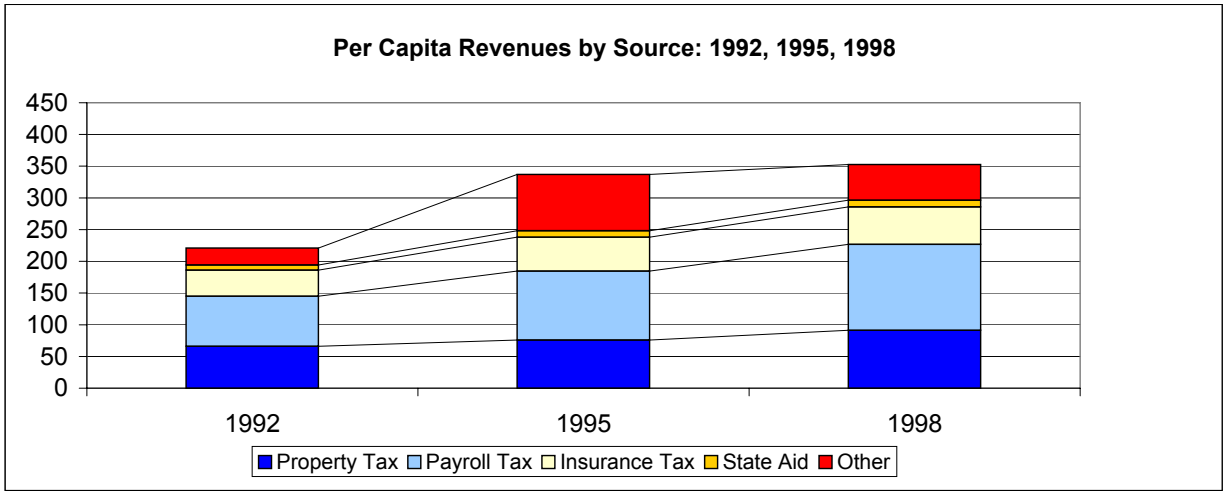
Appendix 2: Fire Protection and Emergency Services in Northern Kentucky

Individual City Depts.	Shared Departments	Volunteer/Professional
Boone County		
Florence		Combined
Union		Volunteeer
Walton		Volunteer
Campbell County		
Fort Thomas		Combined
Melbourne		Volunteer
Newport		Professional
Southgate		Volunteer
Wilder		Combined
Woodlawn		Volunteer
	Alexandria, Unicorporated (pt.)	Combined
	Bellevue, Dayton	Combined
	California, Mentor, Silver Grove, Unincorporated (pt)	Combined
	Cold Spring, Crestview, Highland Heights, Unicorporated (part)	Combined
Kenton County		
Bromley		Volunteer
Covington		Professional
Edgewood		Combined
Erlanger		Combined
Fort Mitchell		Combined
Fort Wright		Combined
Ludlow		Volunteer
Park Hills		Combined
Taylor Mill		Combined
	Crescent Springs, Villa Hills	Combined
	Independence, RylandHeights, Latonia Lakes	Volunteer

Appendix 3: Charts

Chart 1: Total, 37 Municipalities





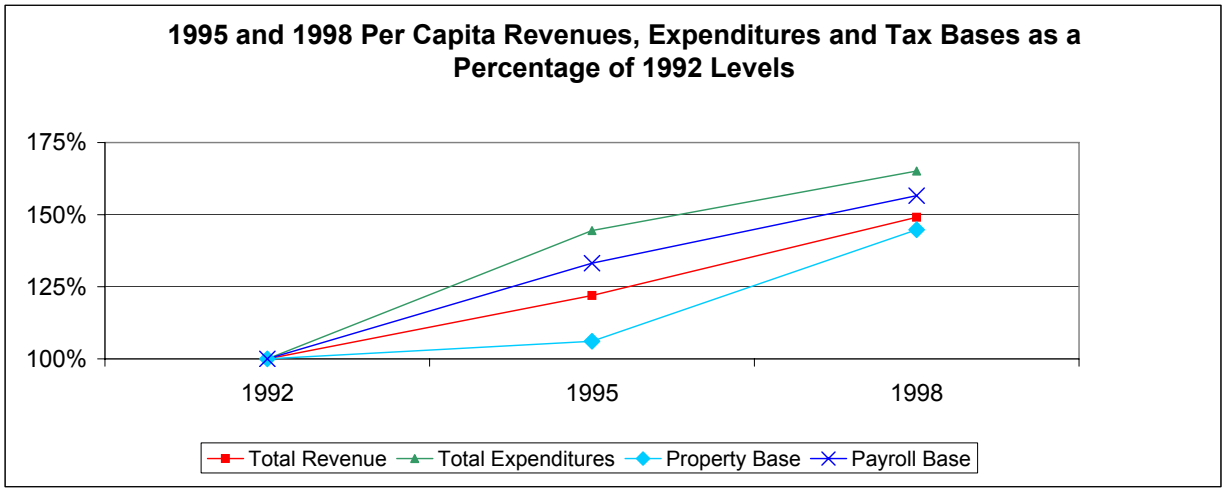
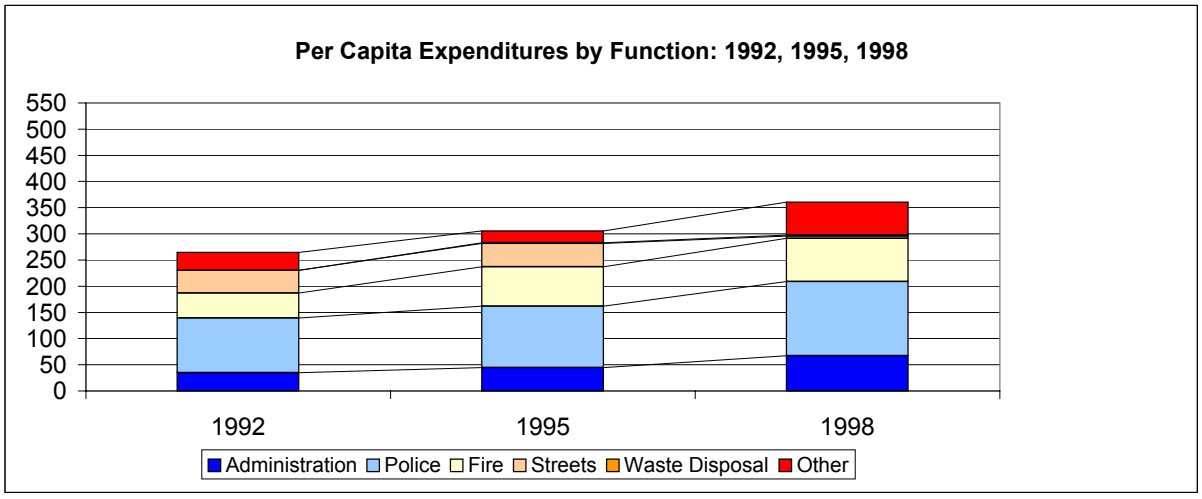
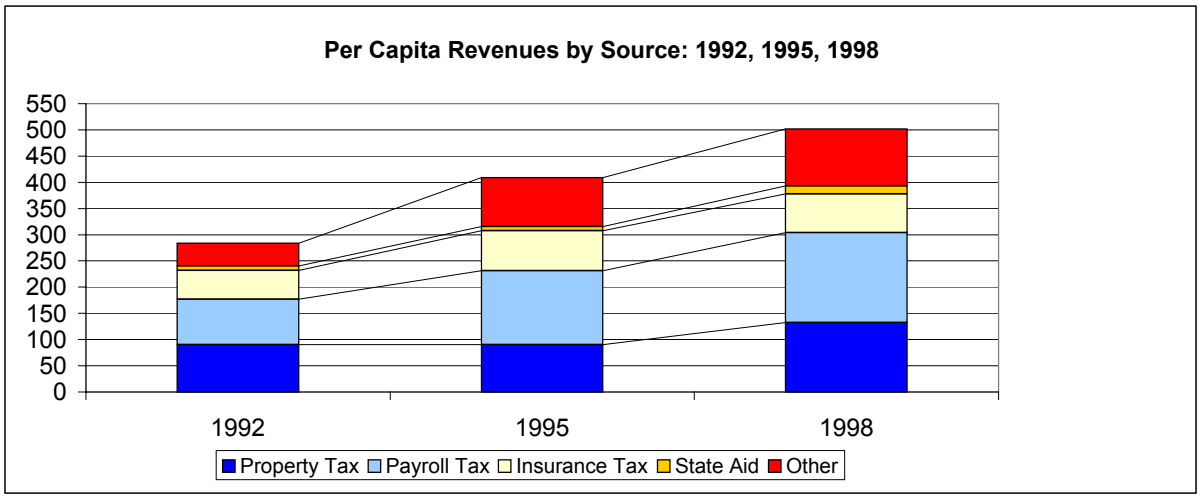


Chart 2: Boone County Total





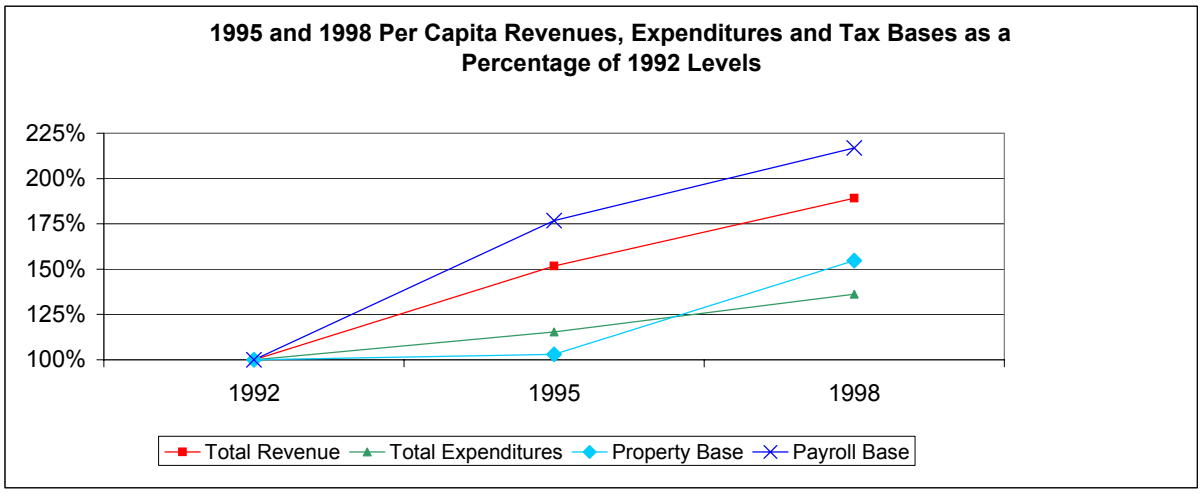
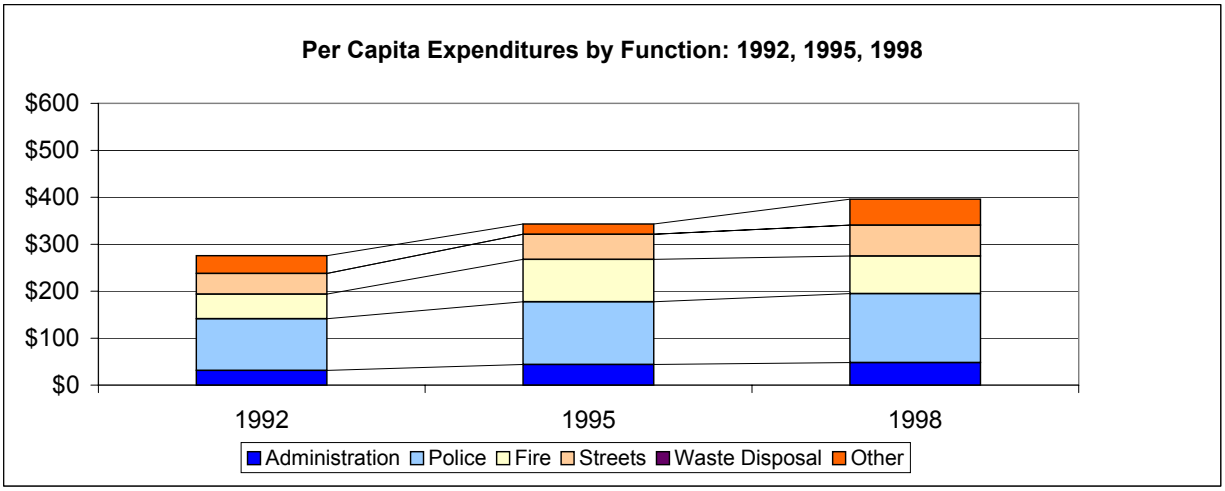
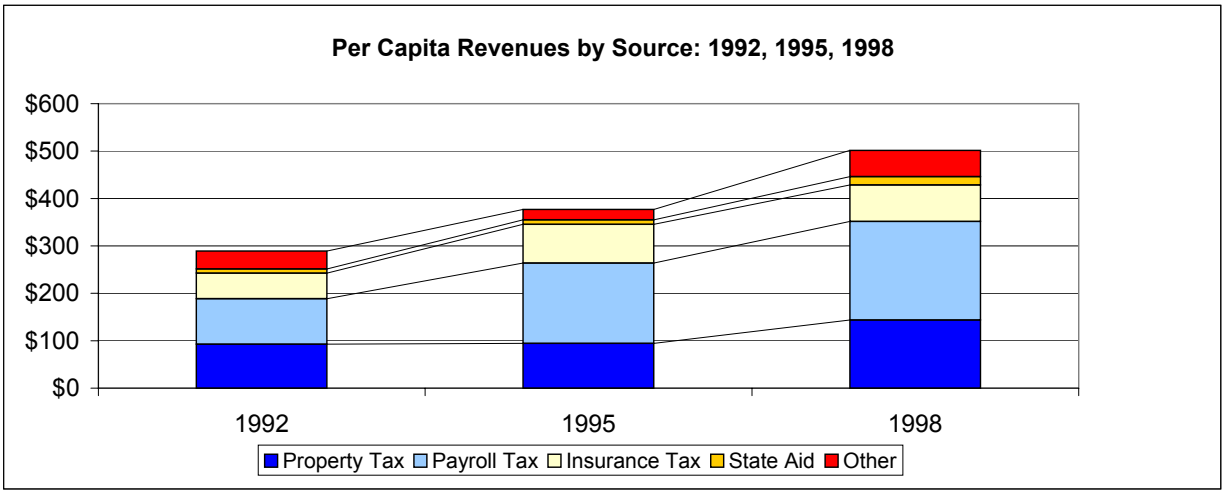


Chart 3: Florence





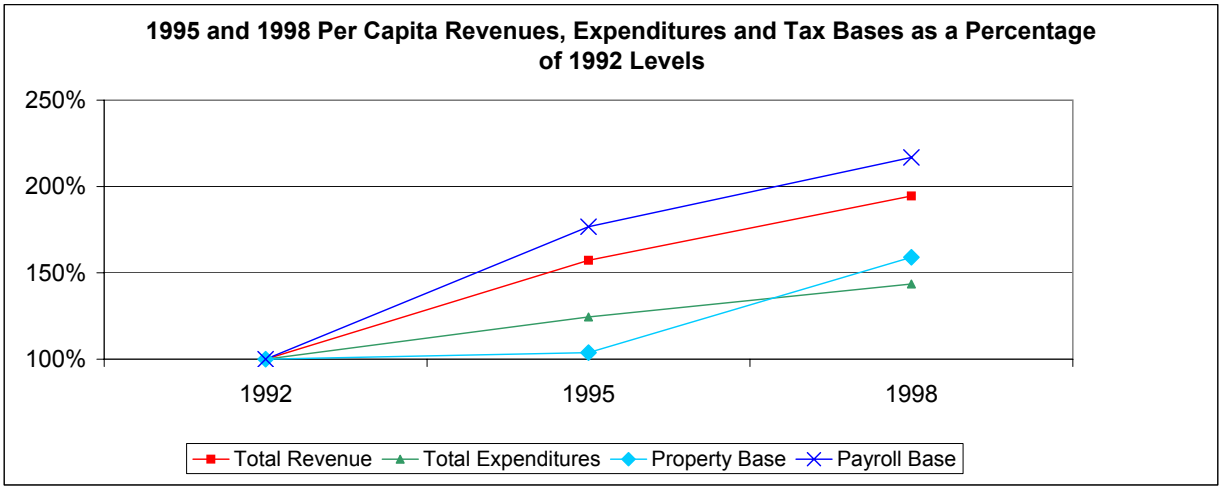
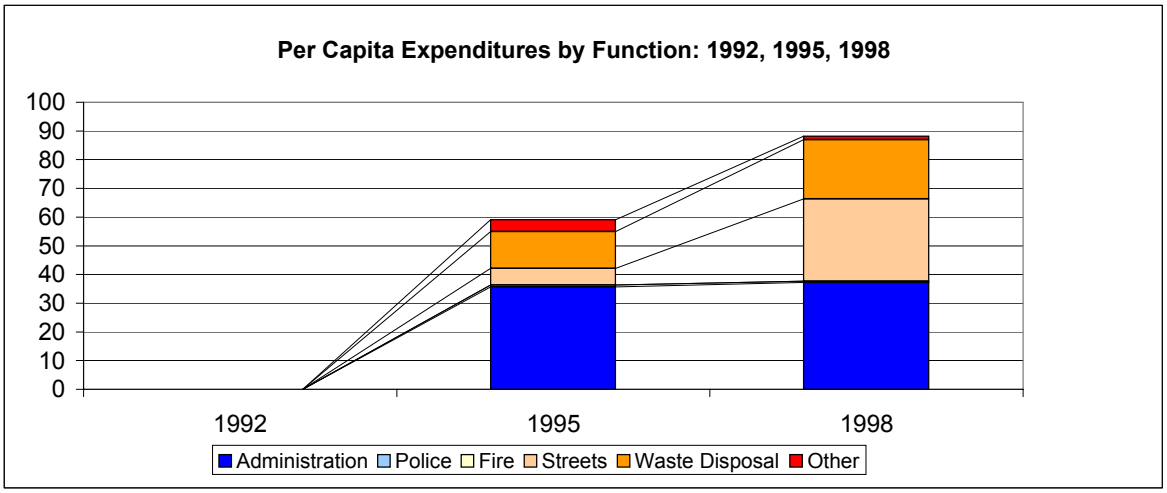
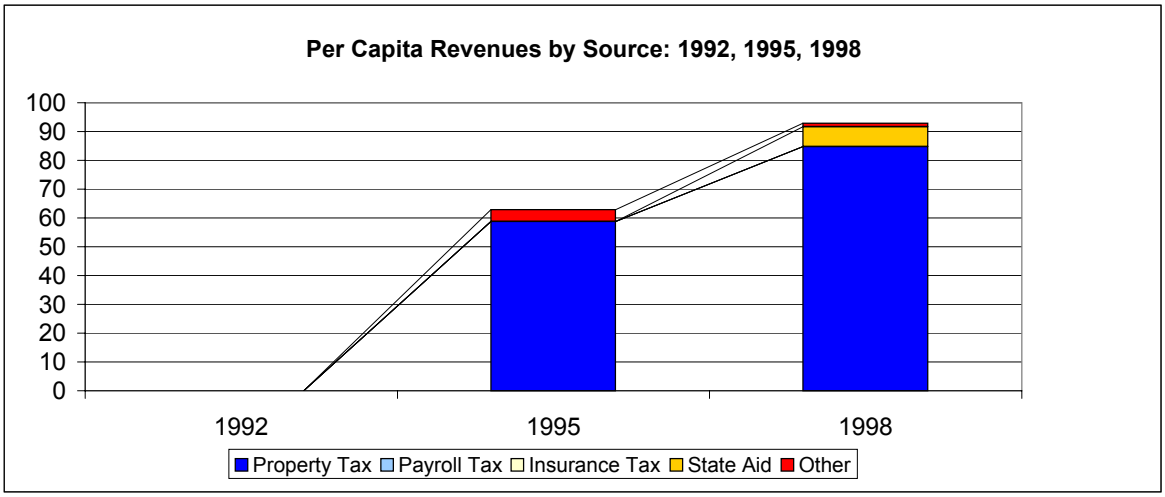


Chart 4: Union





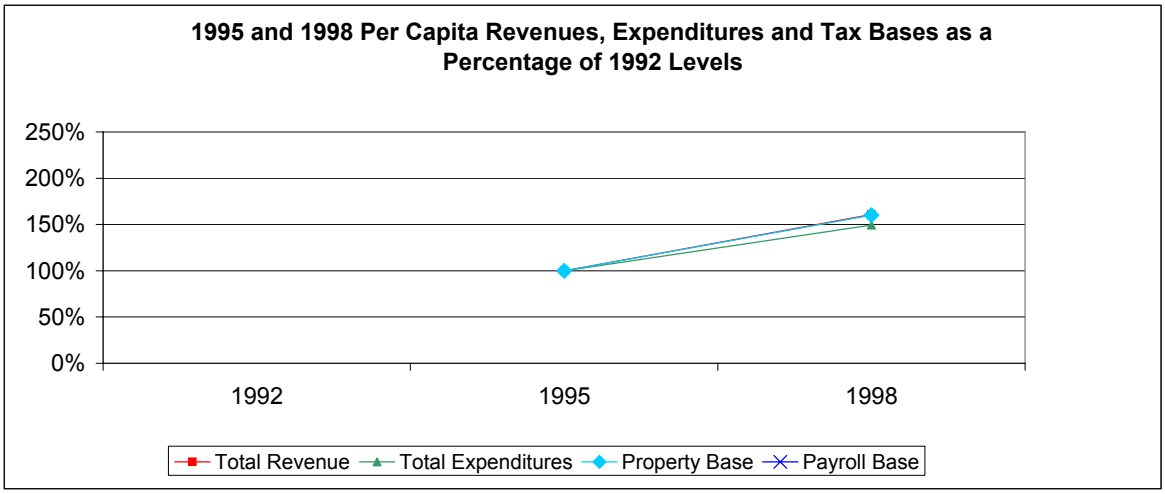
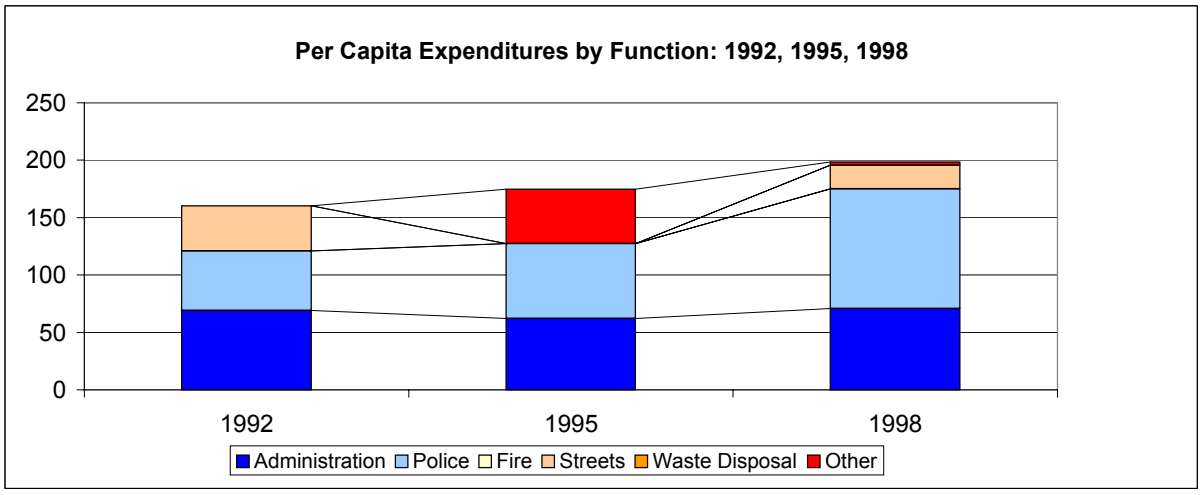
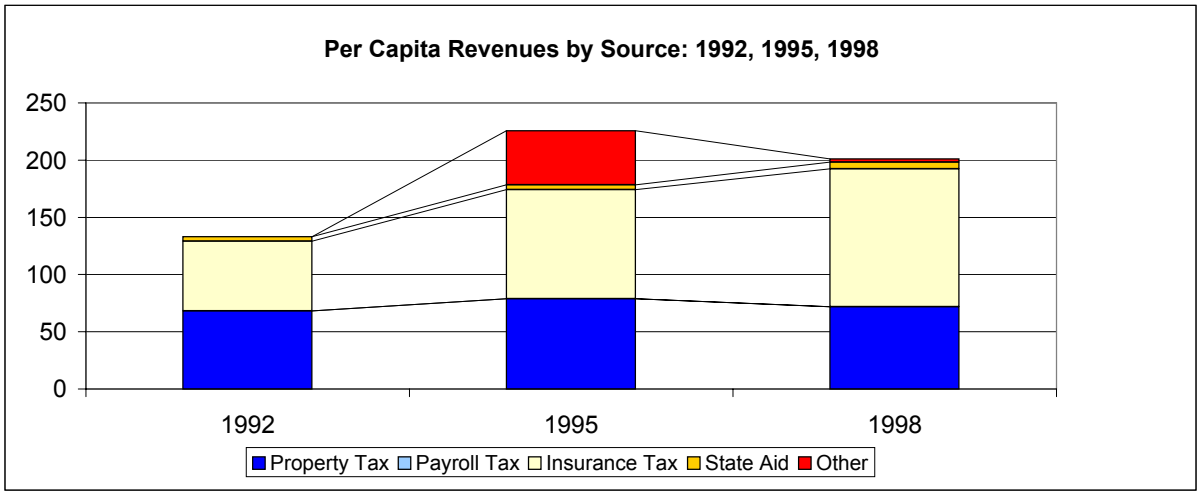


Chart 5: Walton





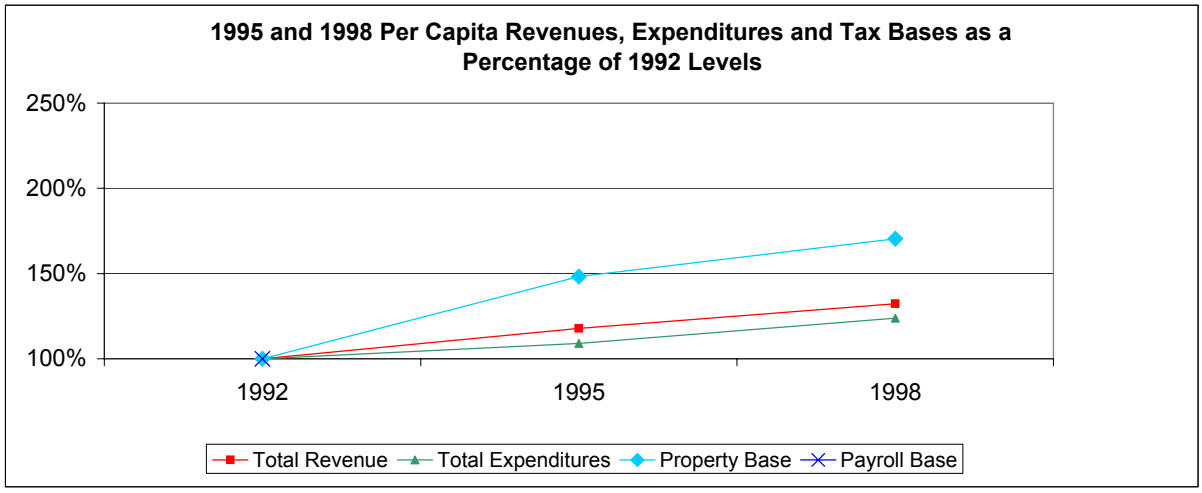
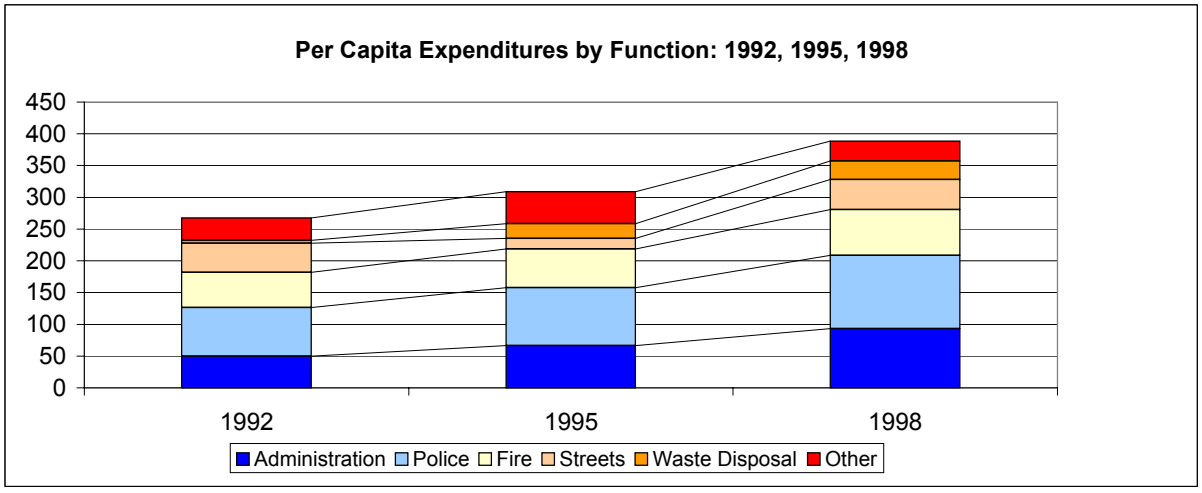
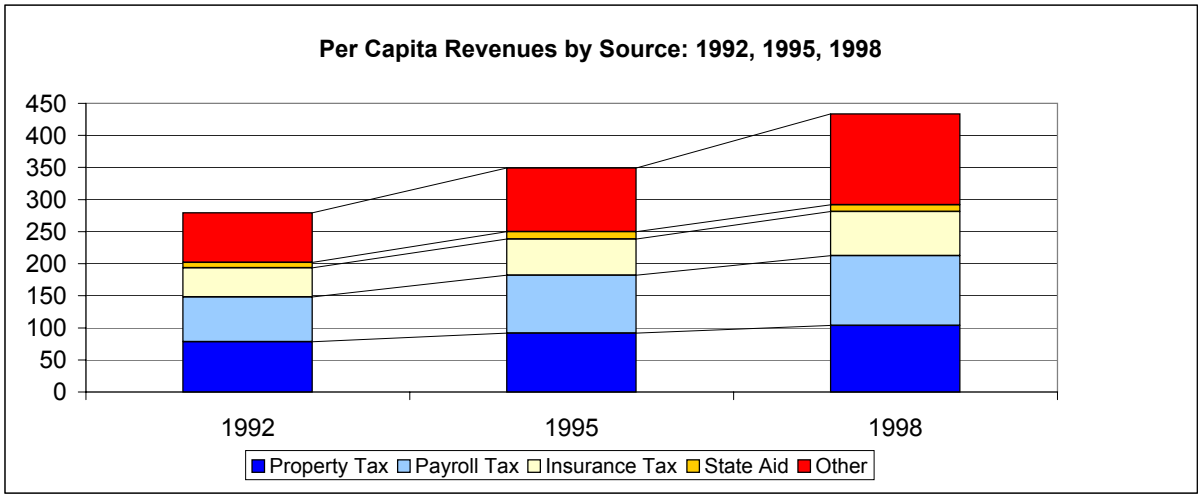


Chart 6: Campbell County Total





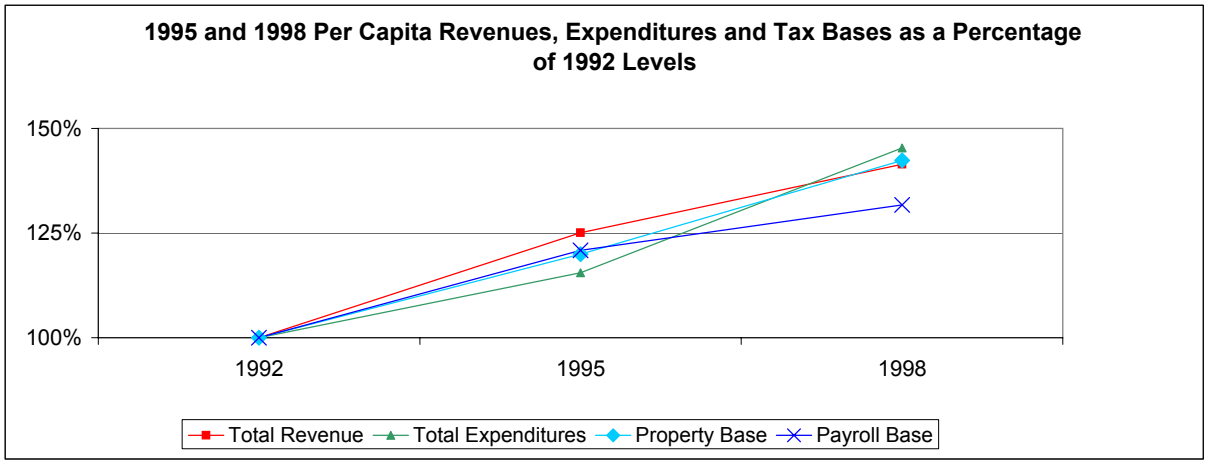
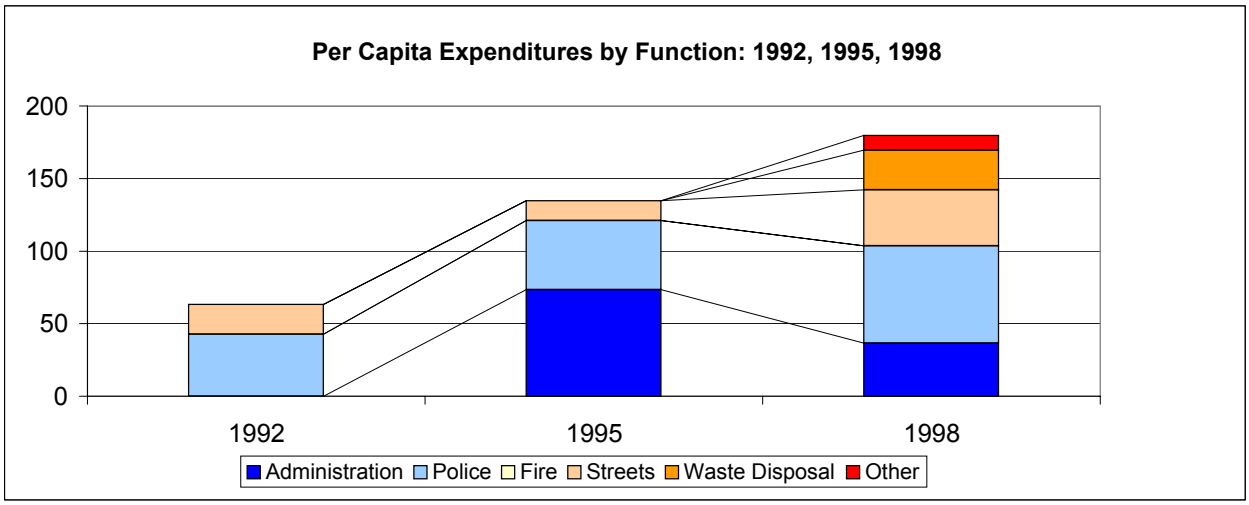
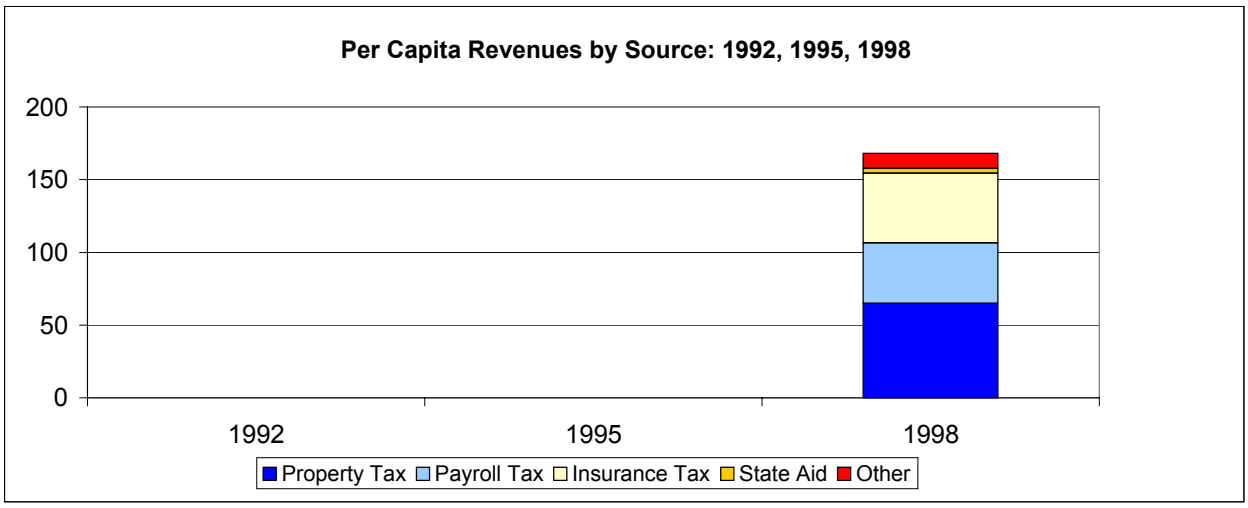


Chart 7: Alexandria





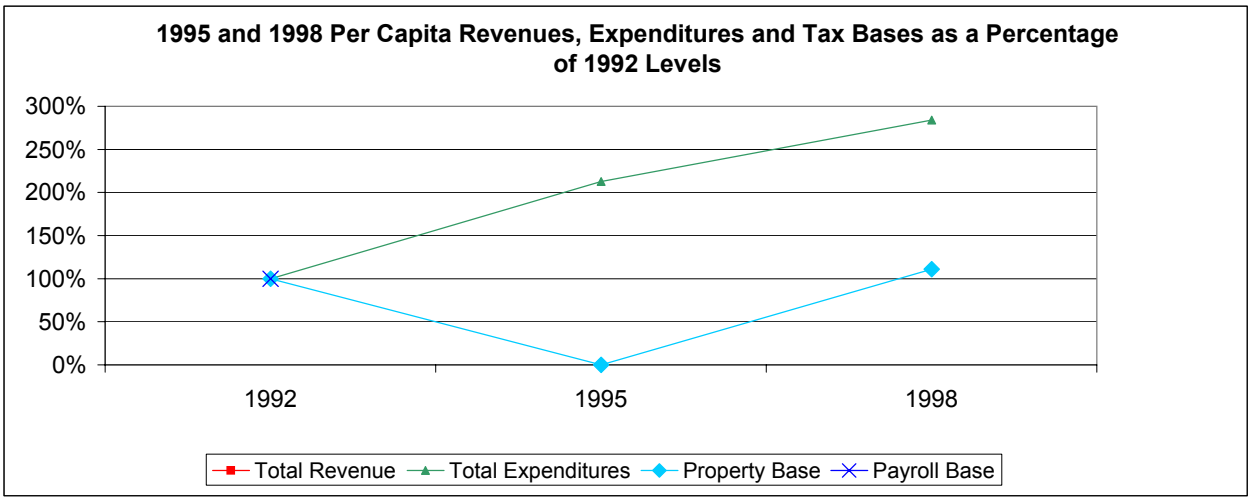
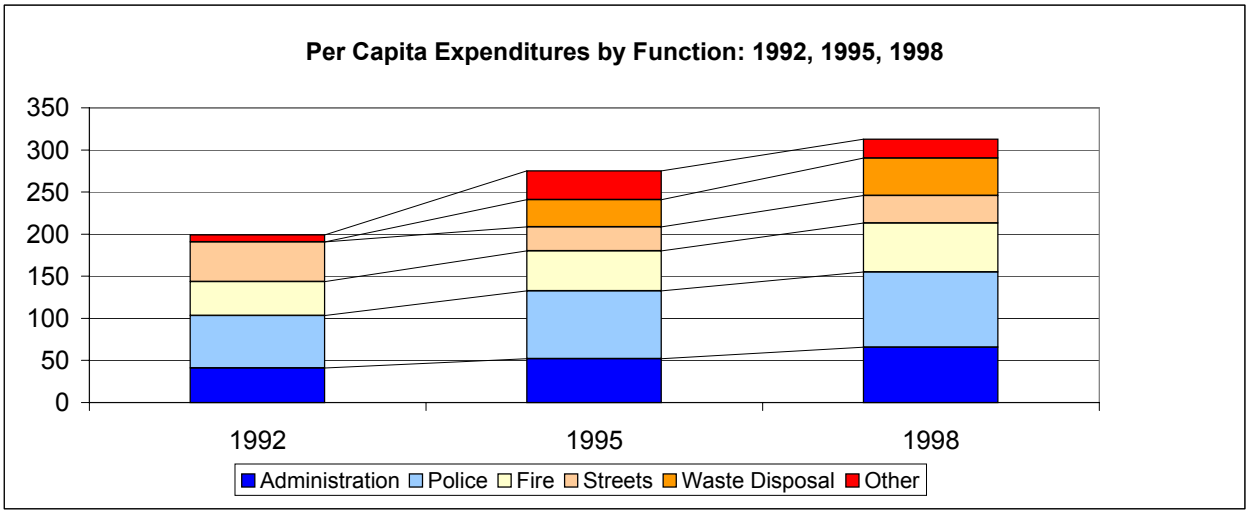
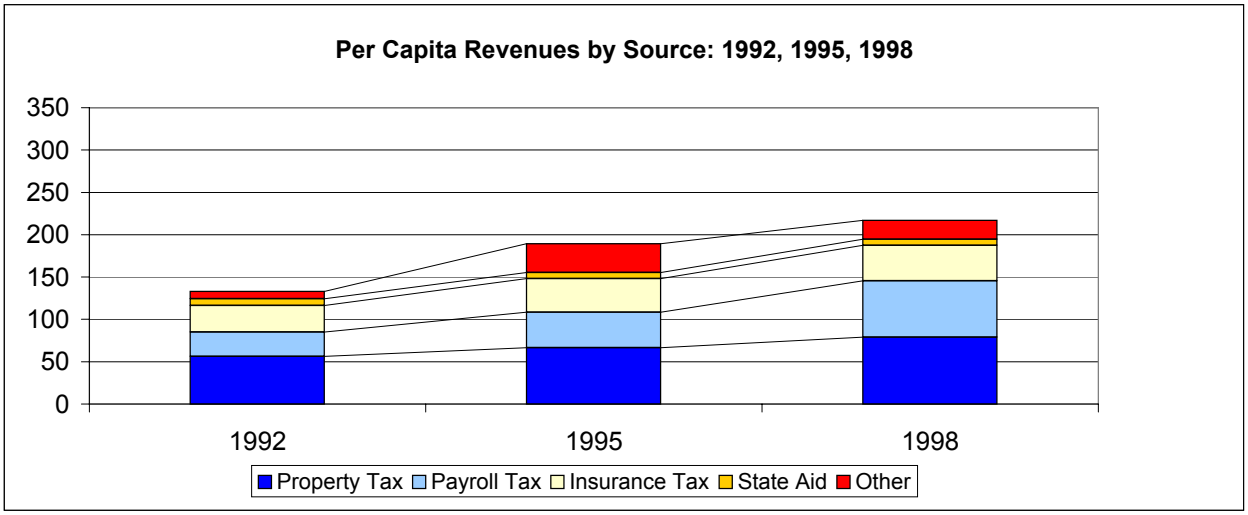


Chart 8: Bellevue





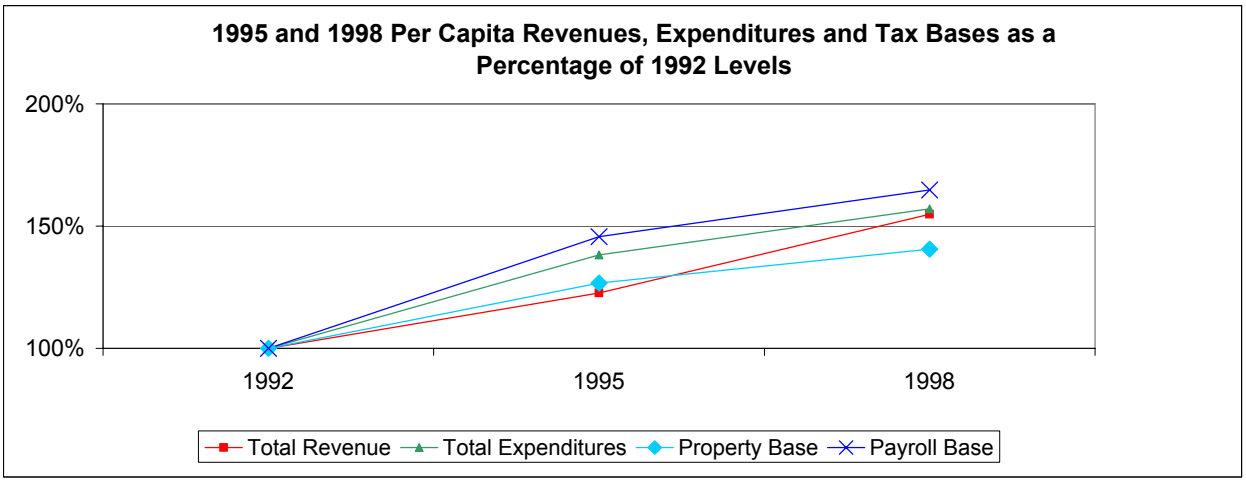
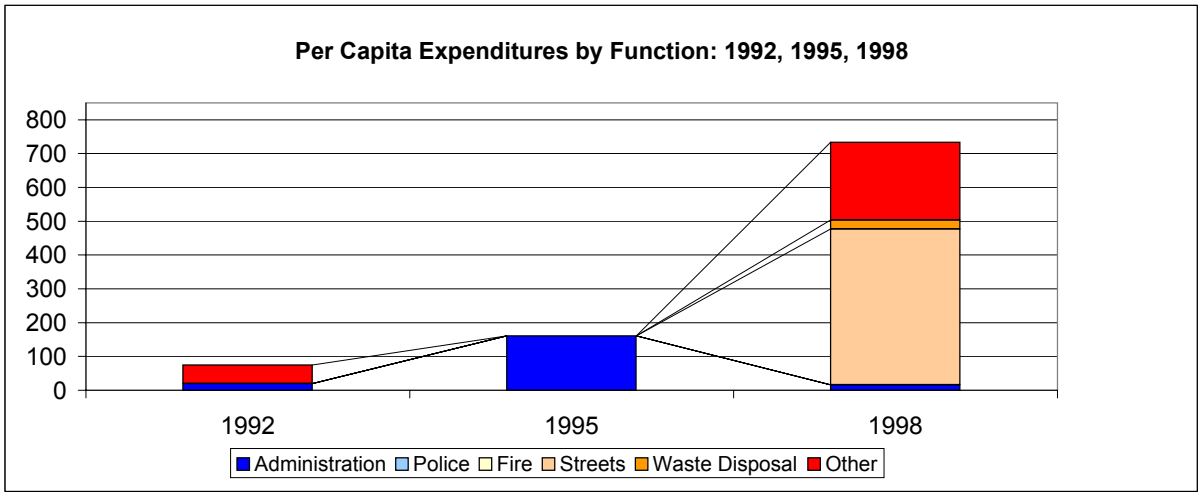
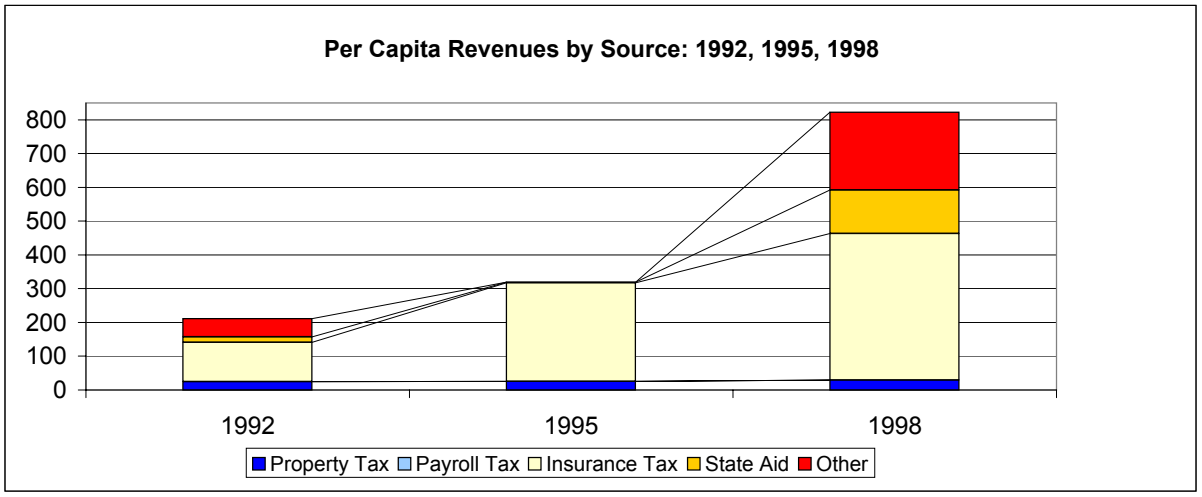


Chart 9: California





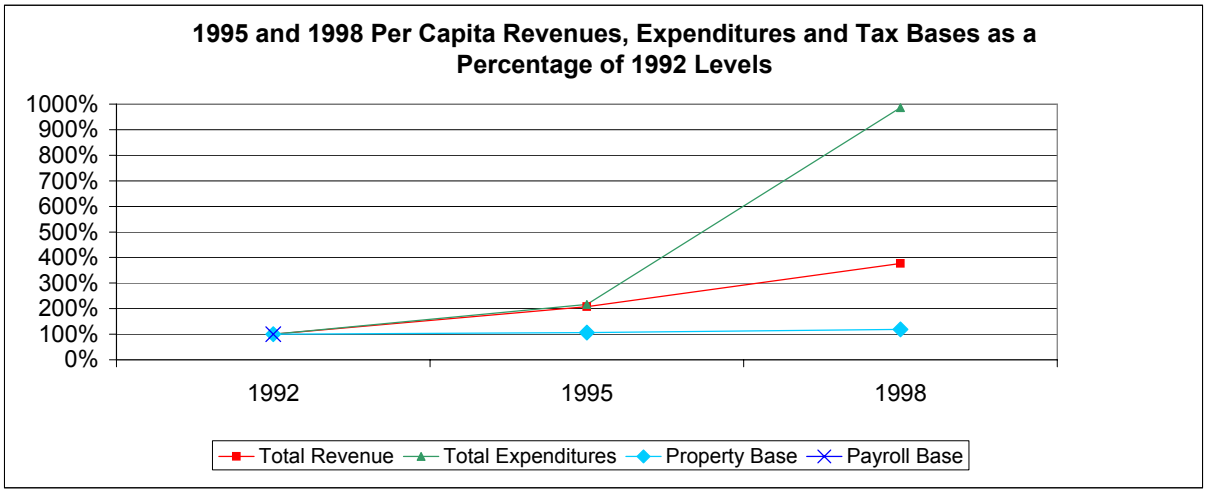
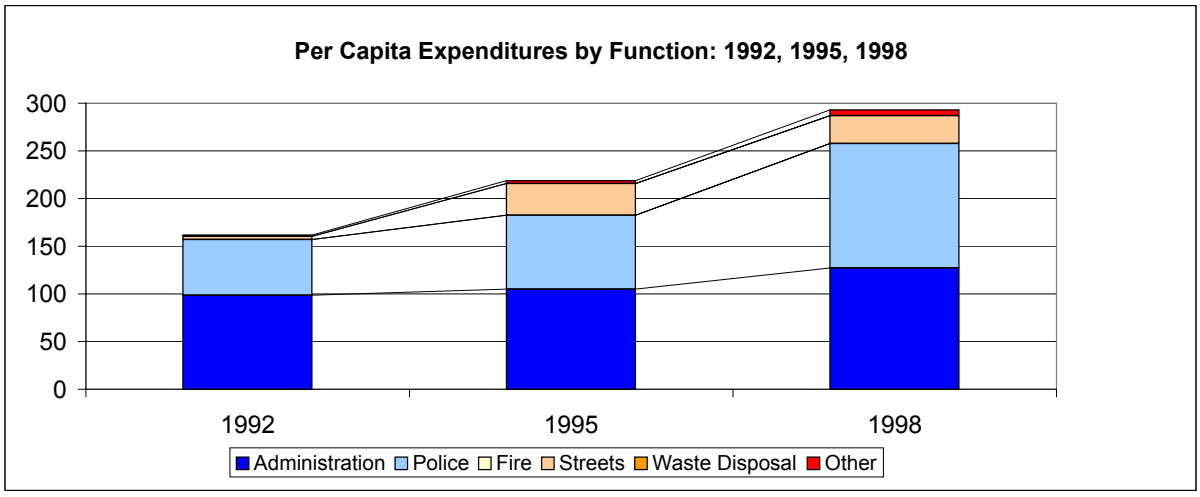
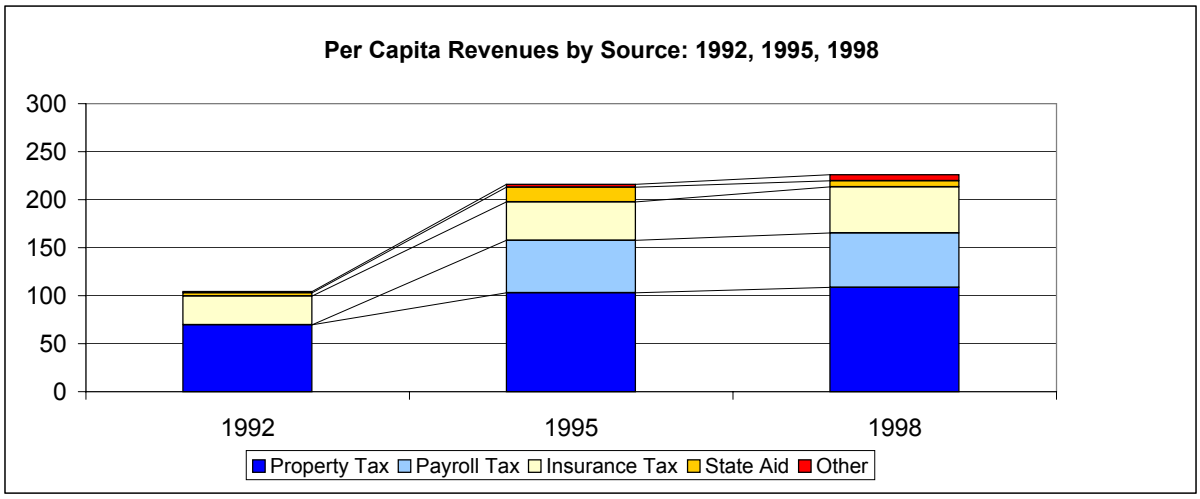


Chart 10: Cold Spring





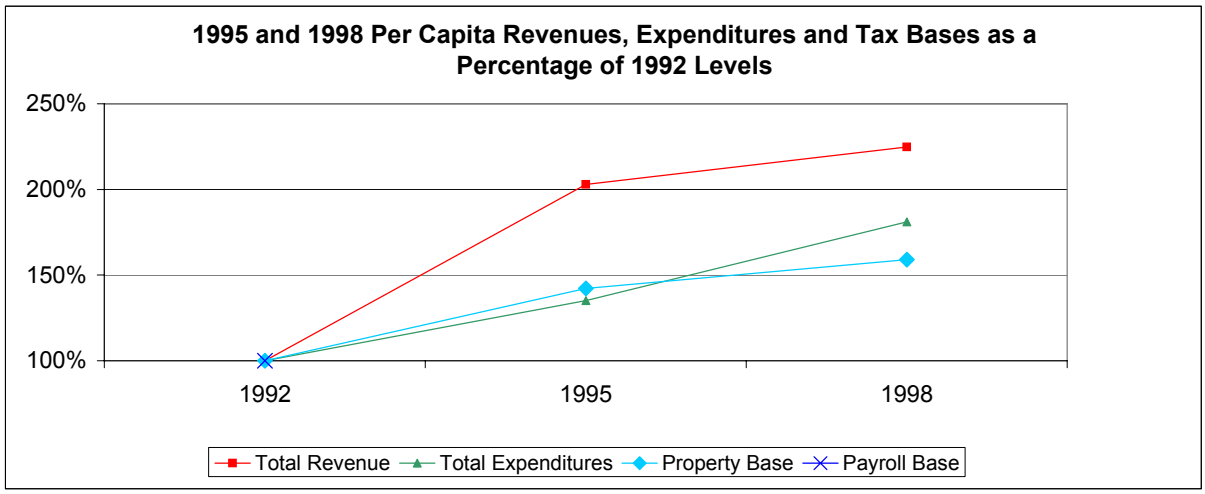
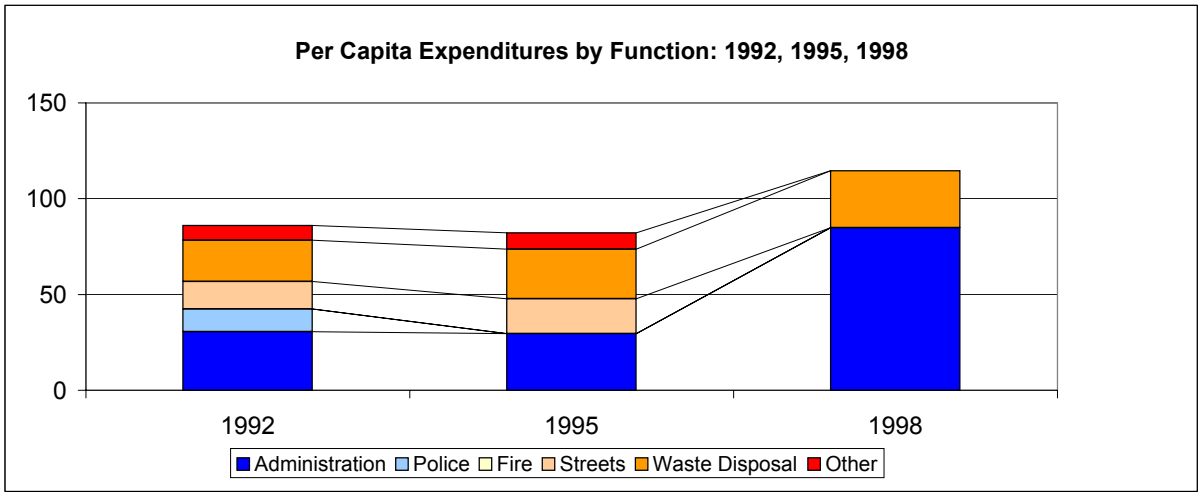
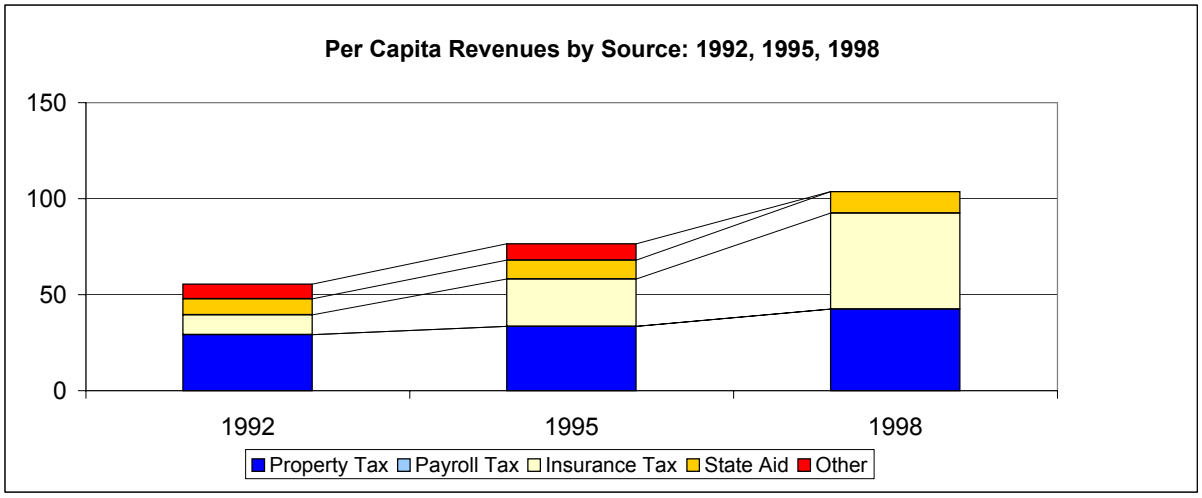


Chart 11: Crestview





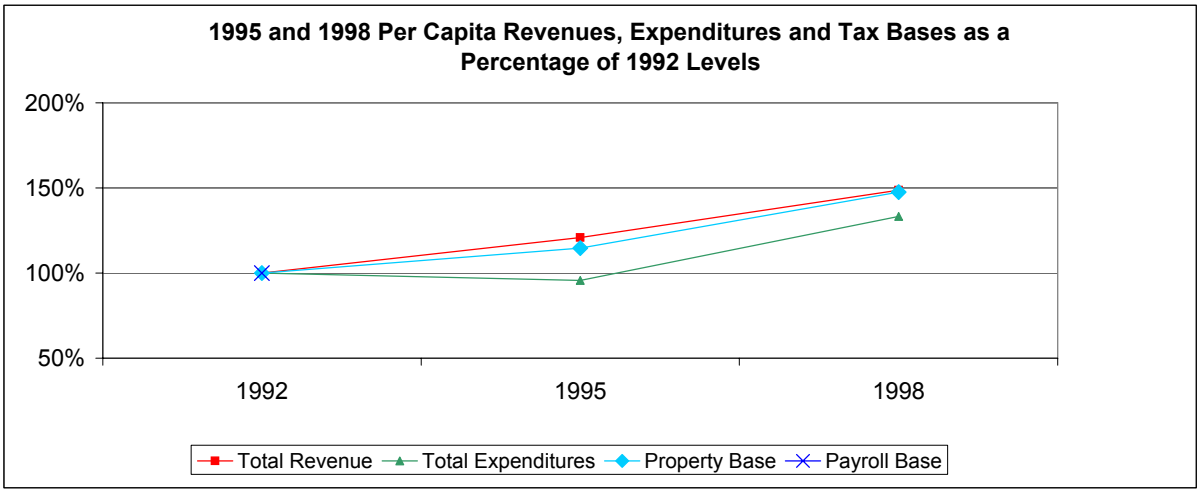
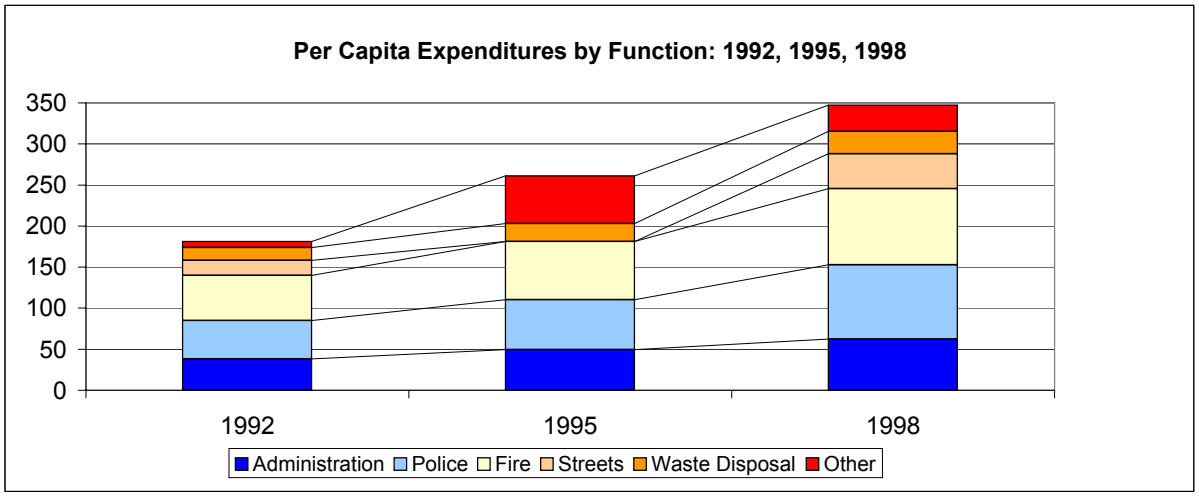
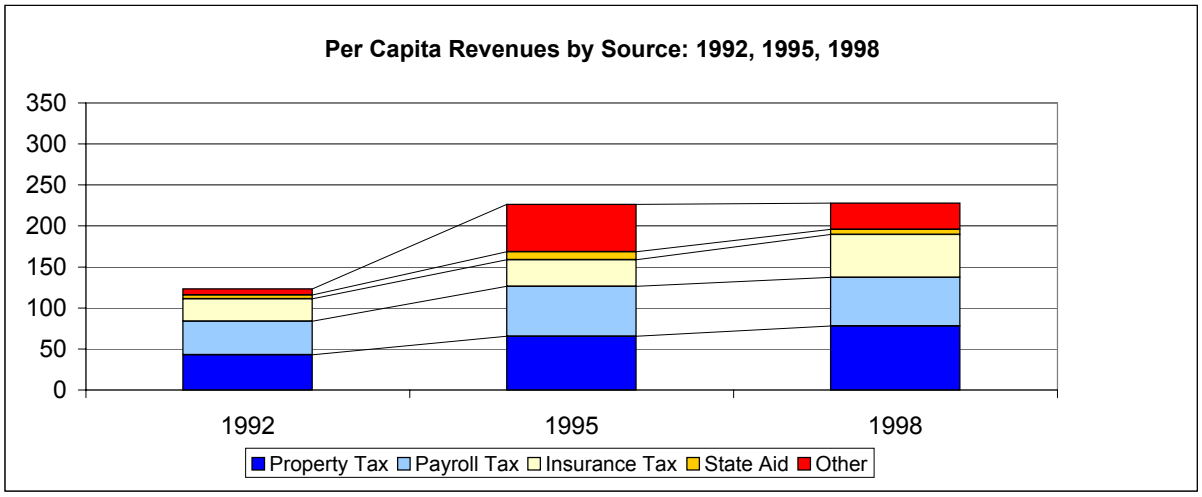


Chart12: Dayton





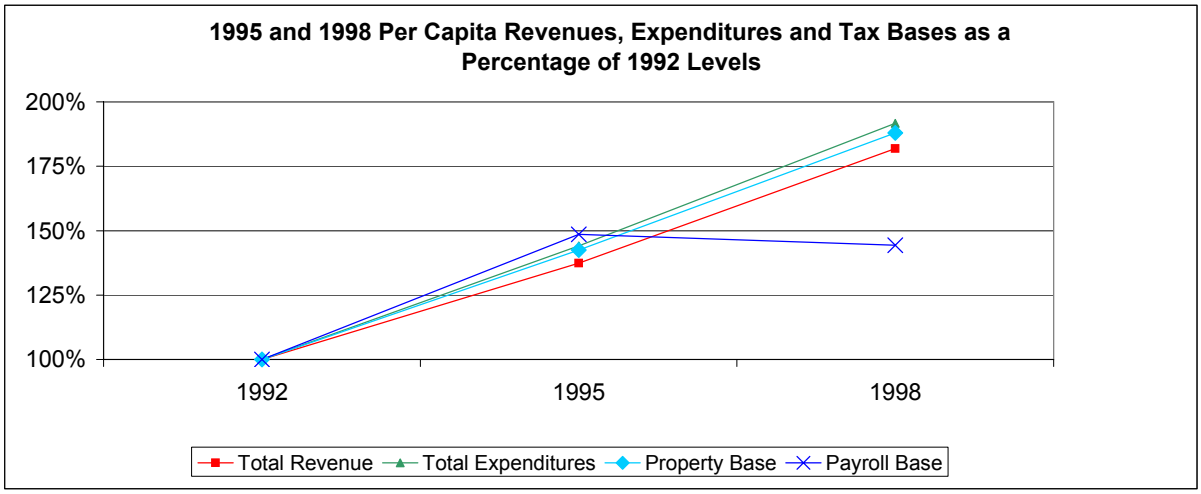
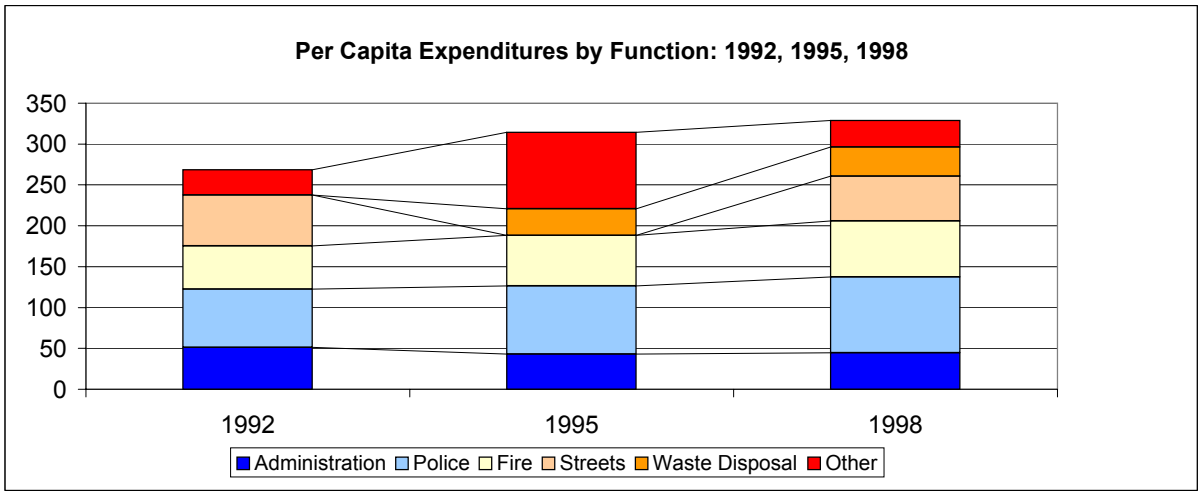
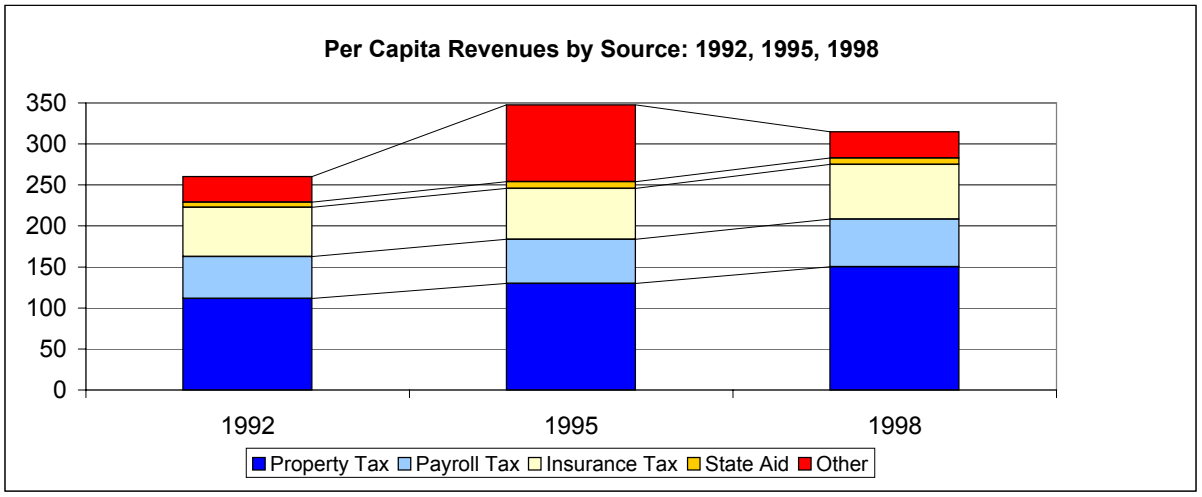


Chart 13: Fort Thomas





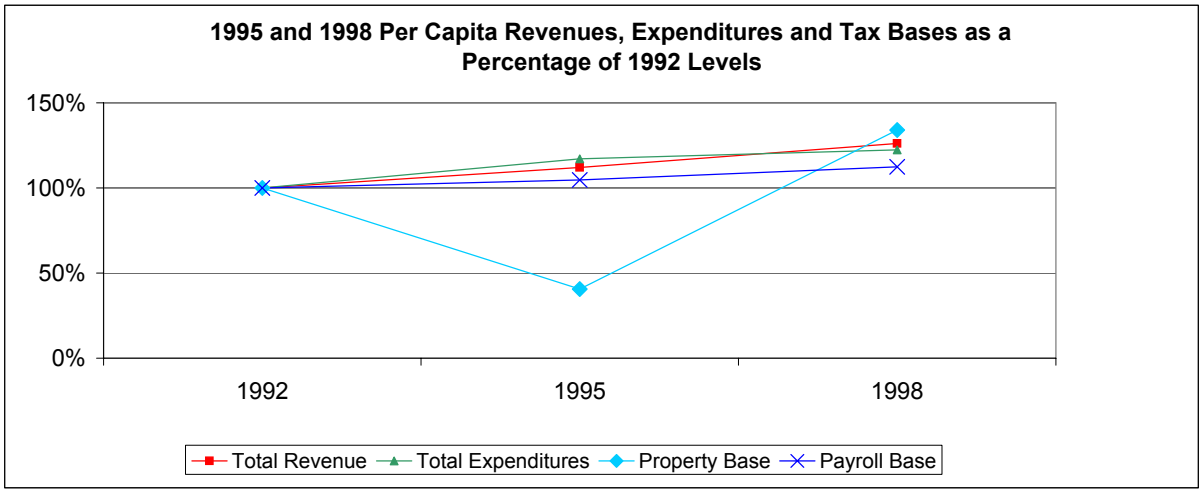
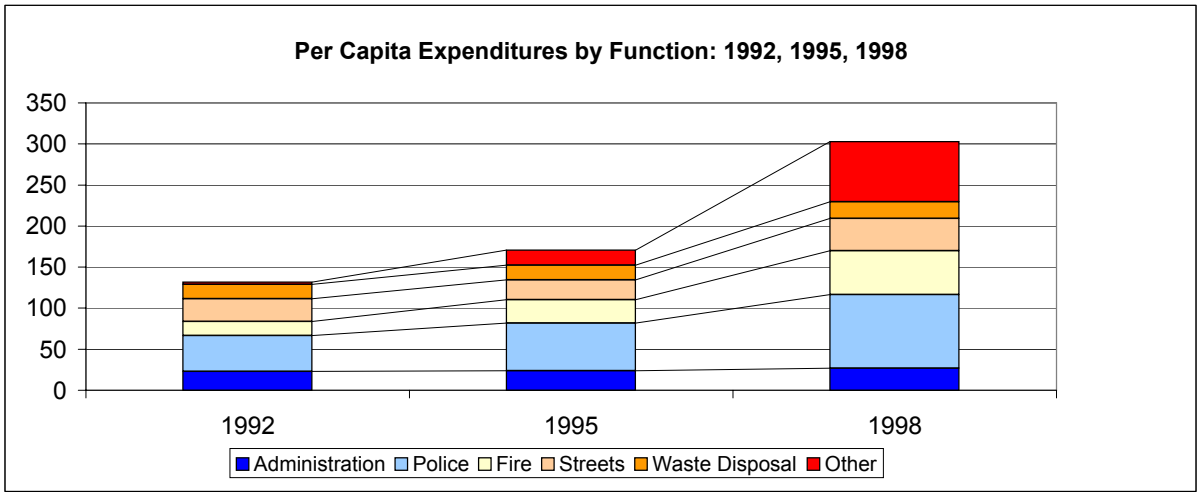
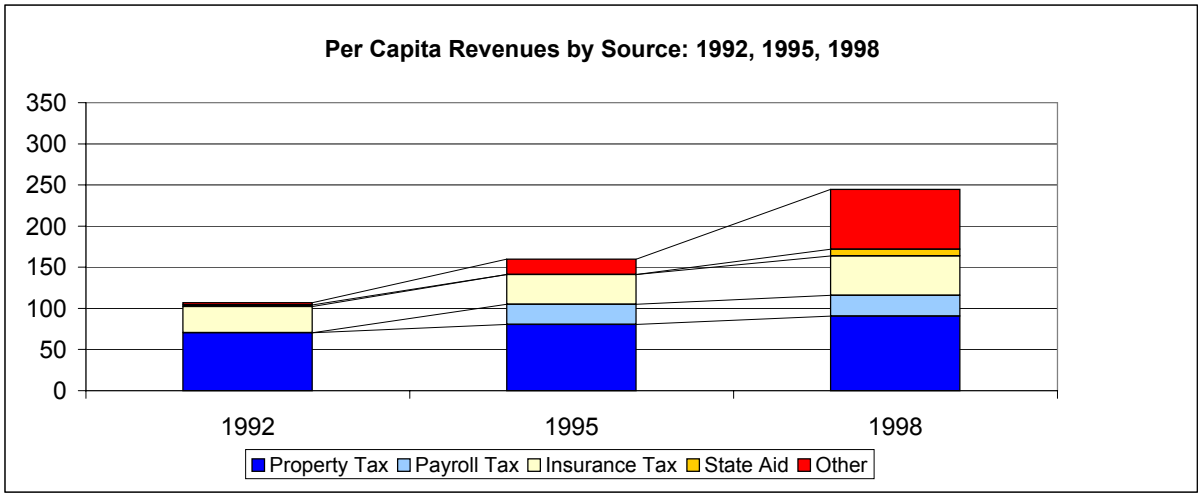


Chart 14: Highland Heights





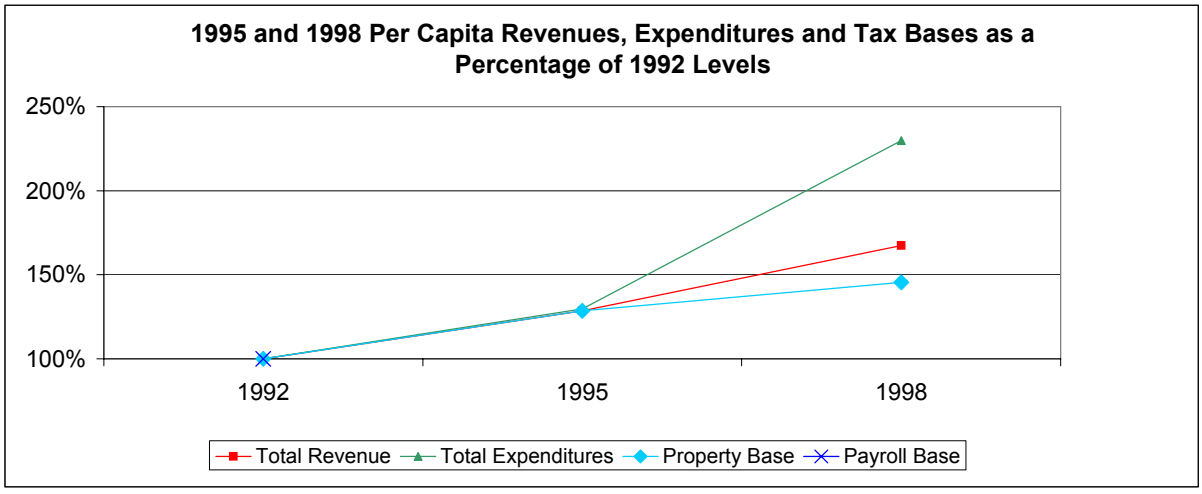
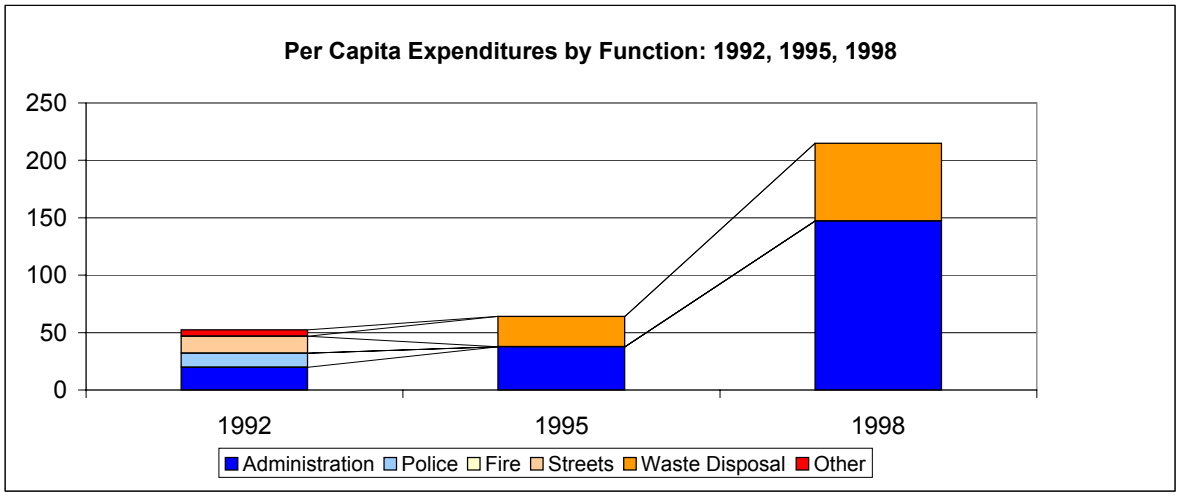
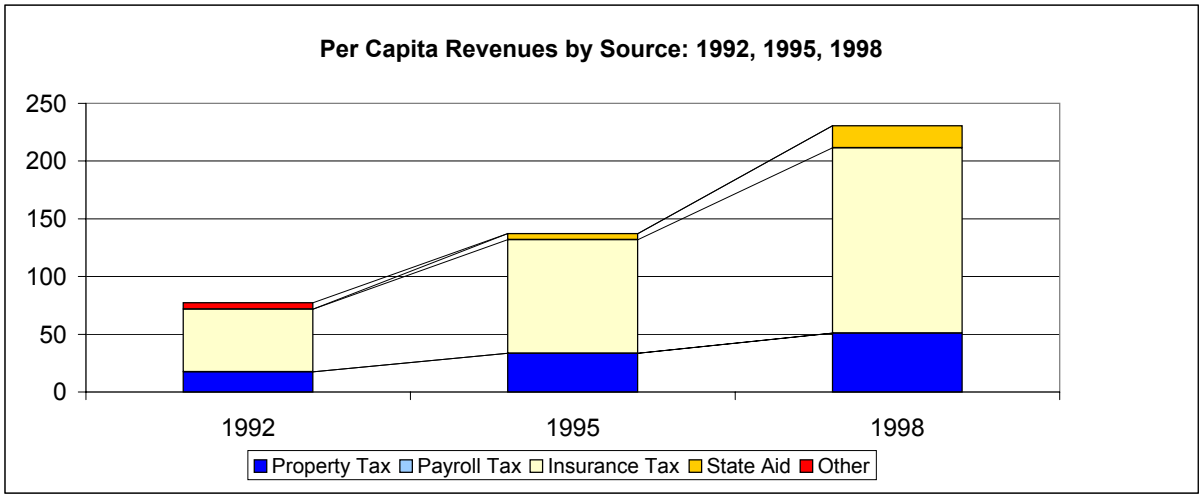


Chart 15: Melbourne





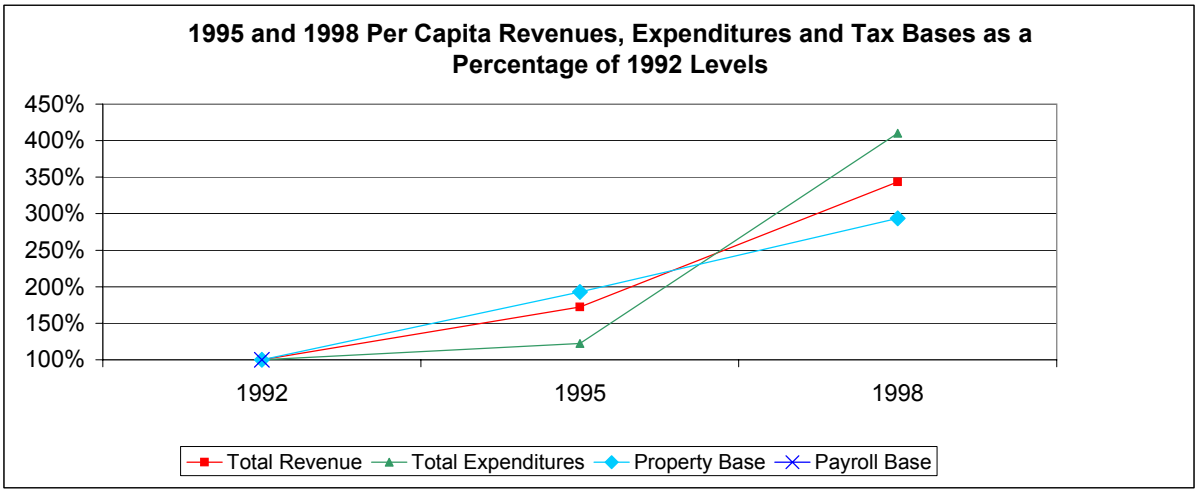
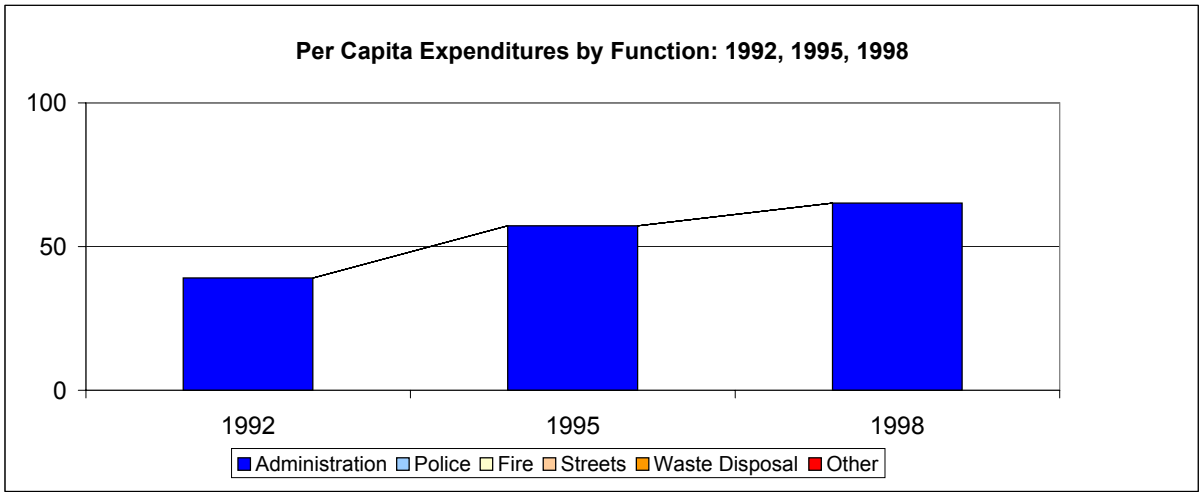
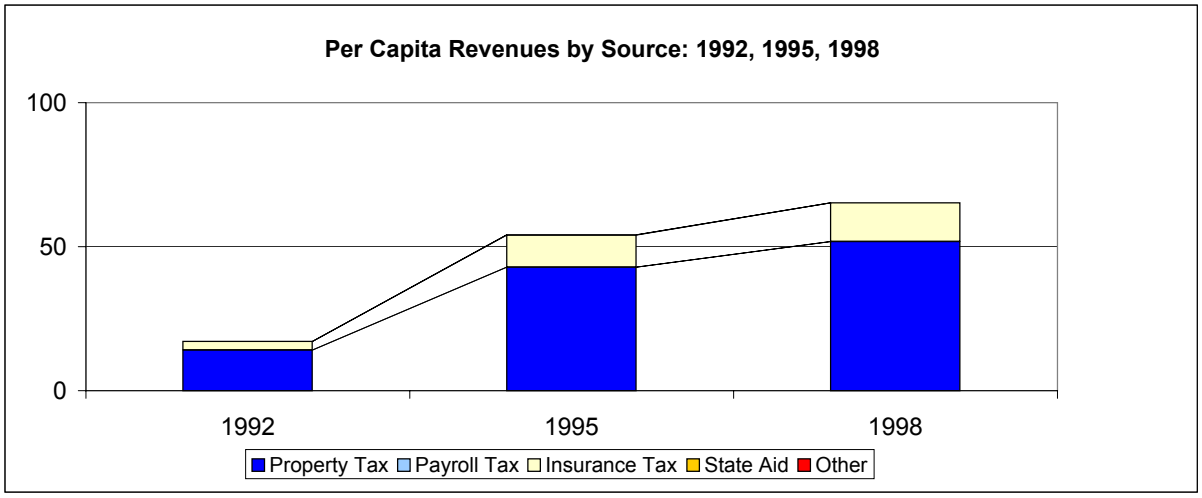


Chart 16: Mentor





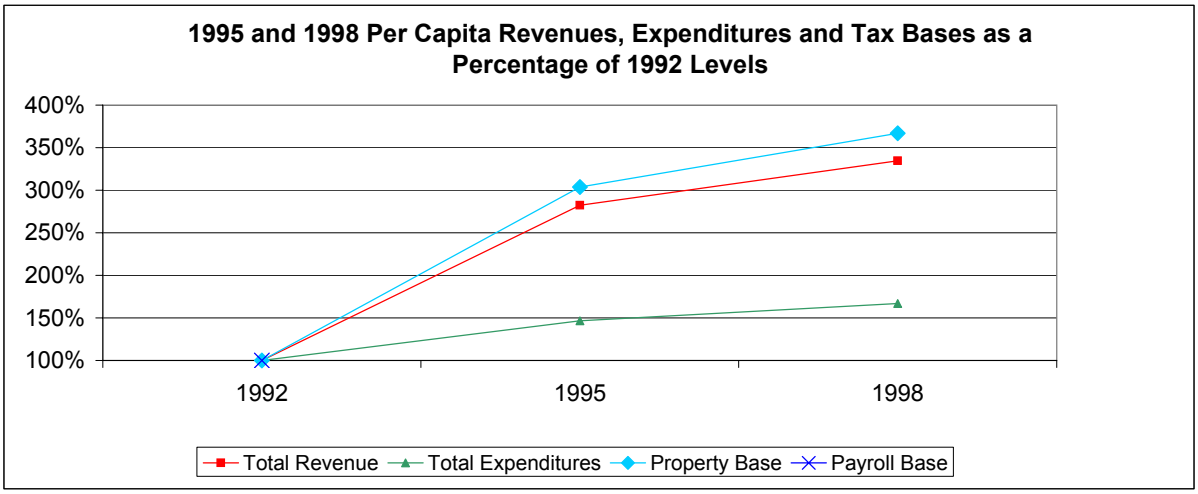
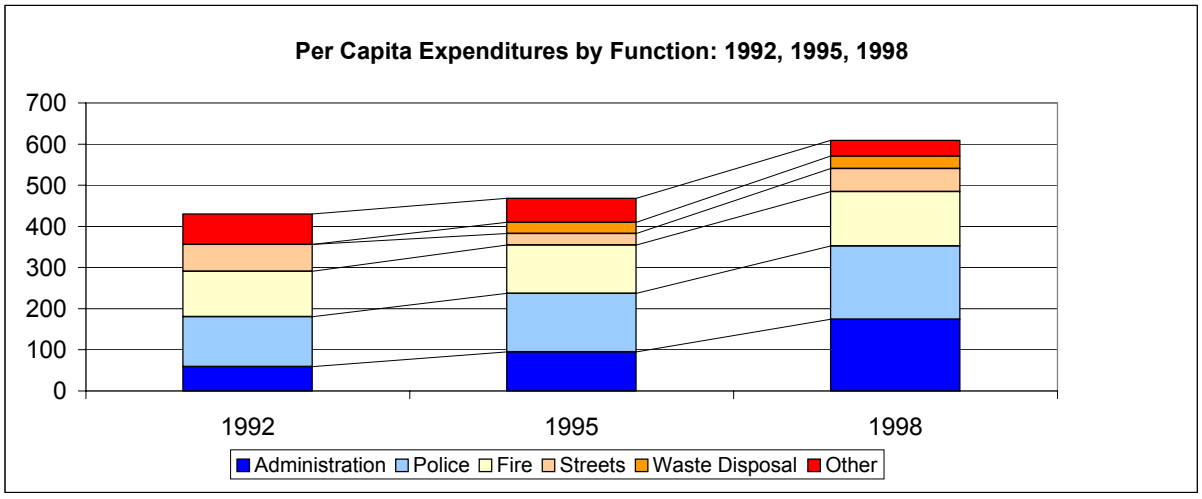
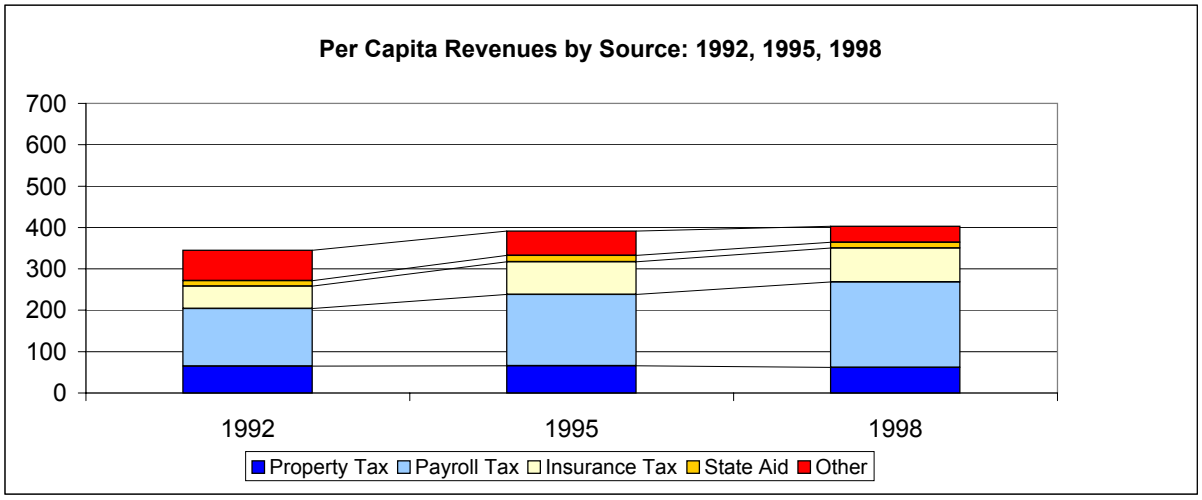


Chart 17: Newport





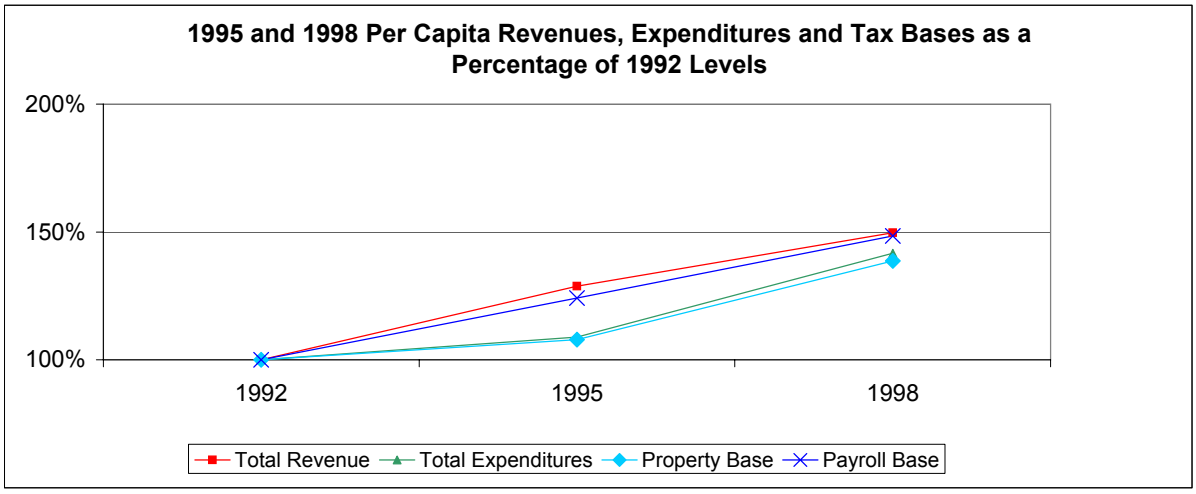
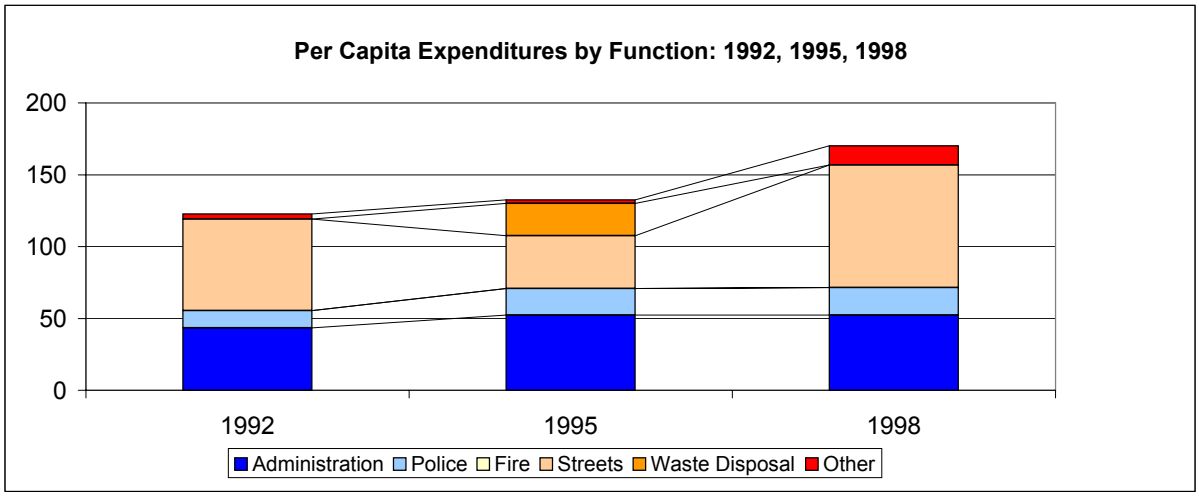
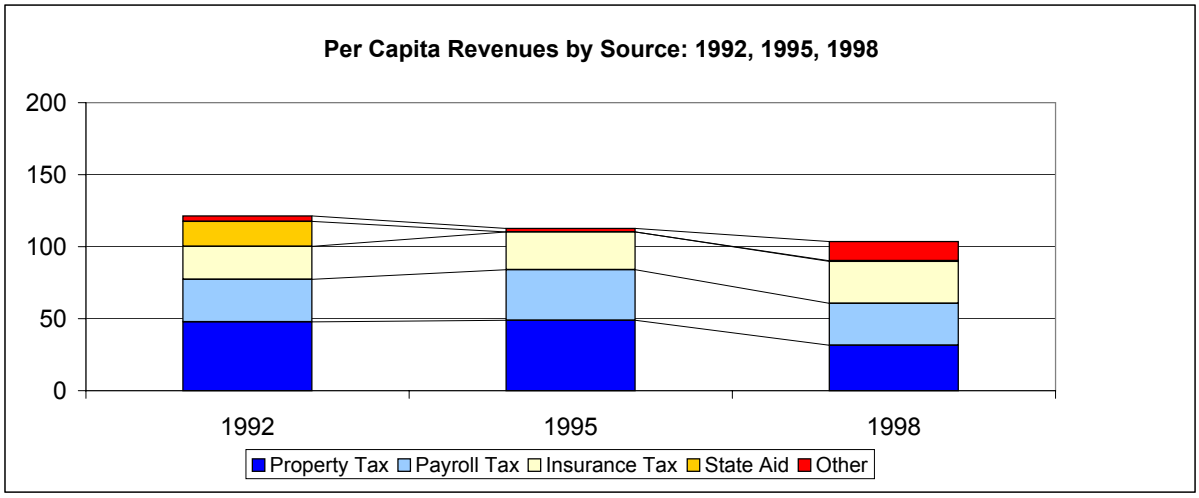


Chart 18: Silver Grove





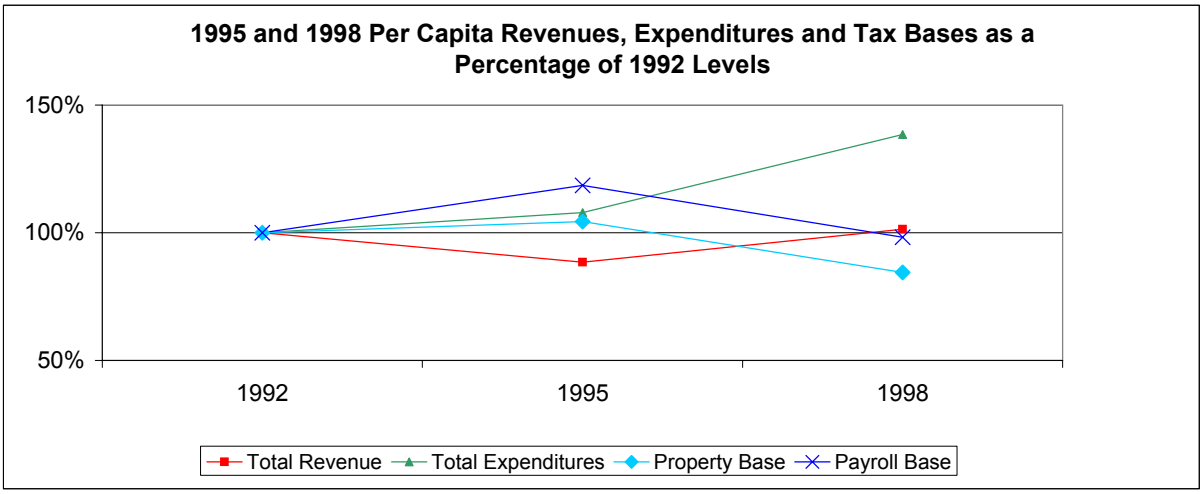
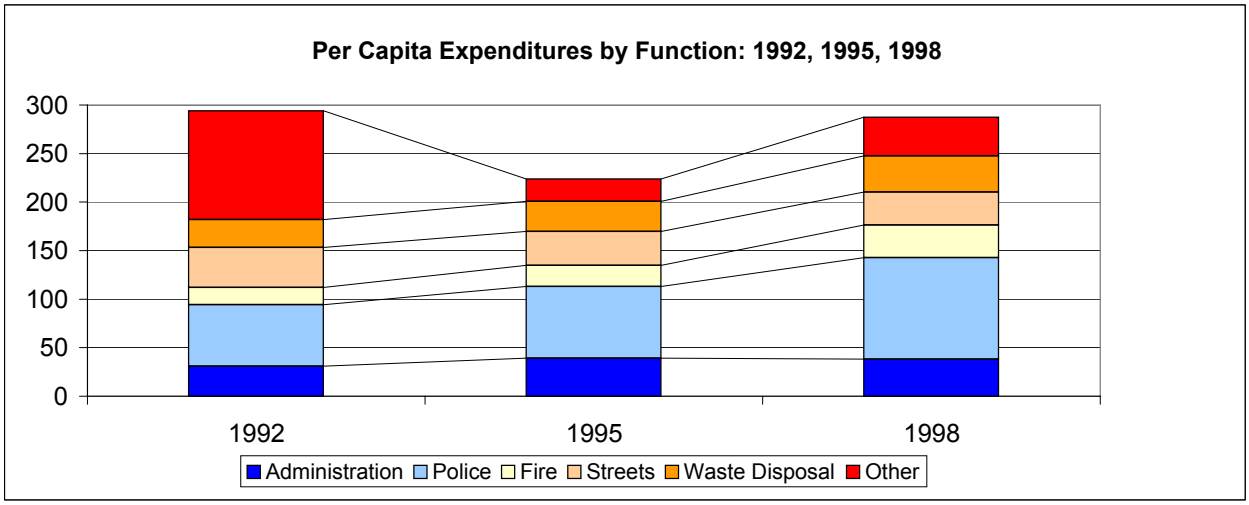
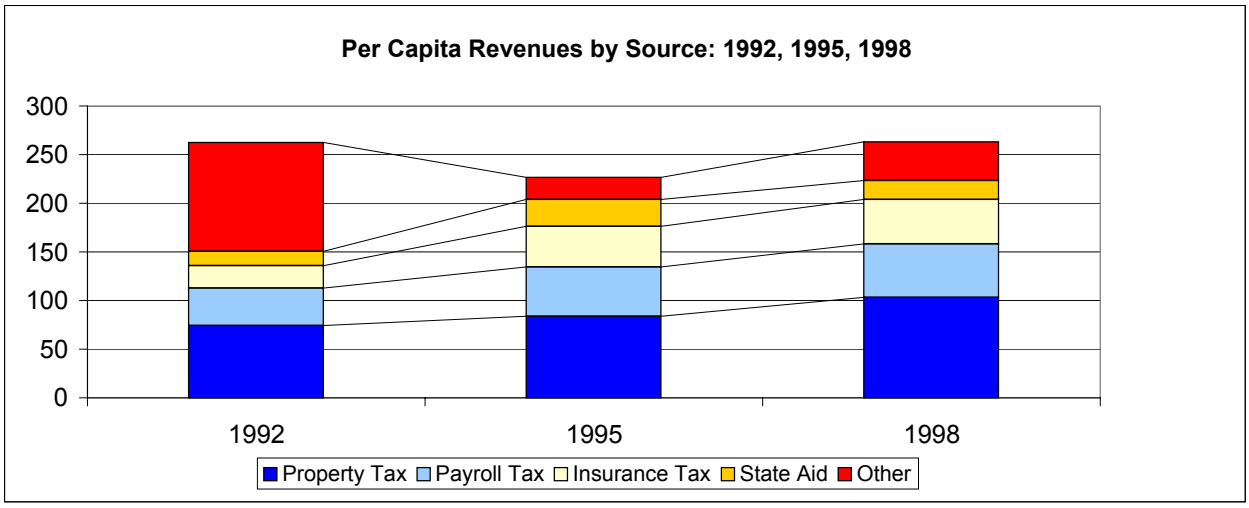


Chart 19: Southgate





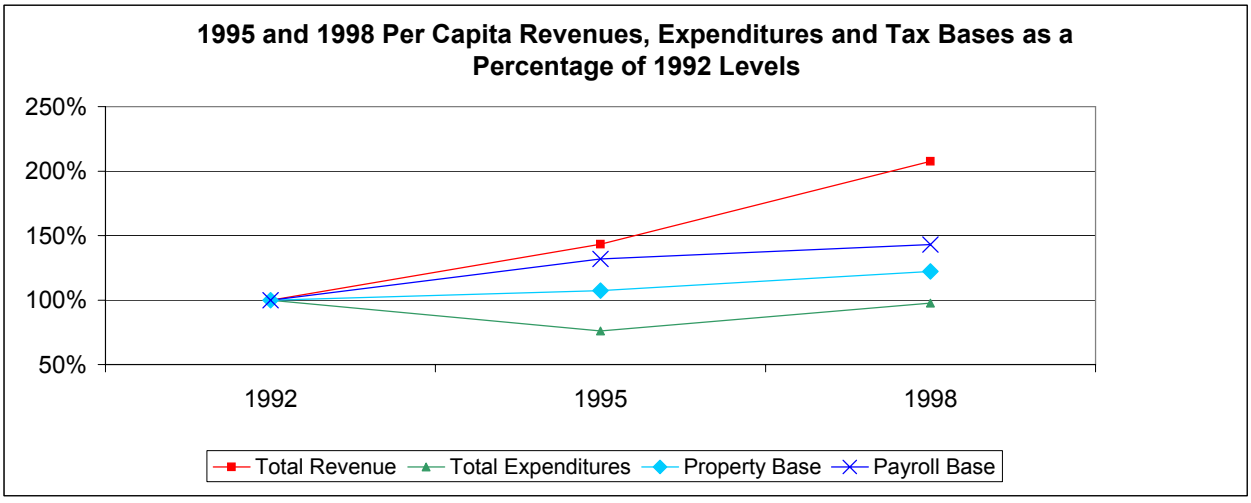
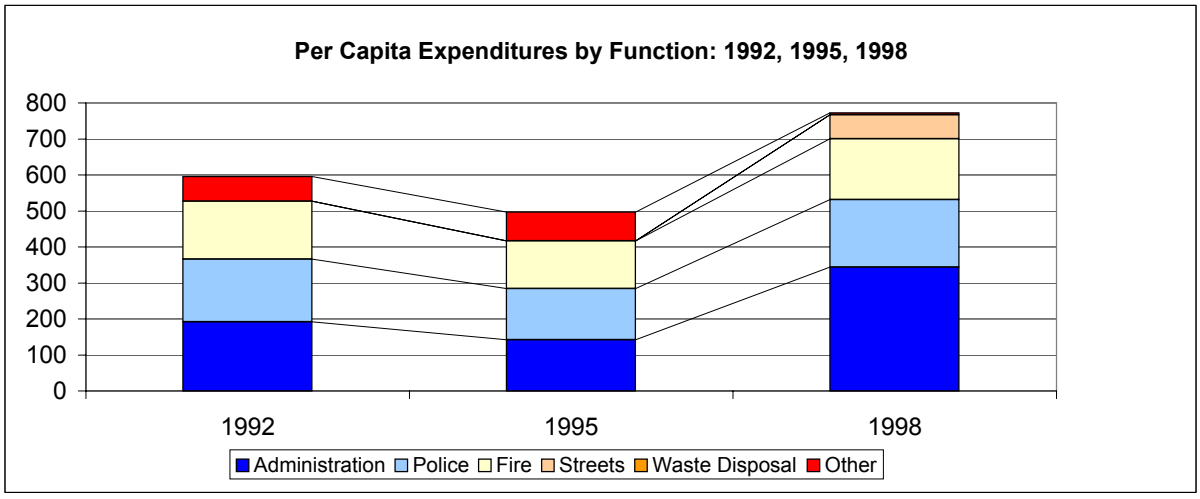
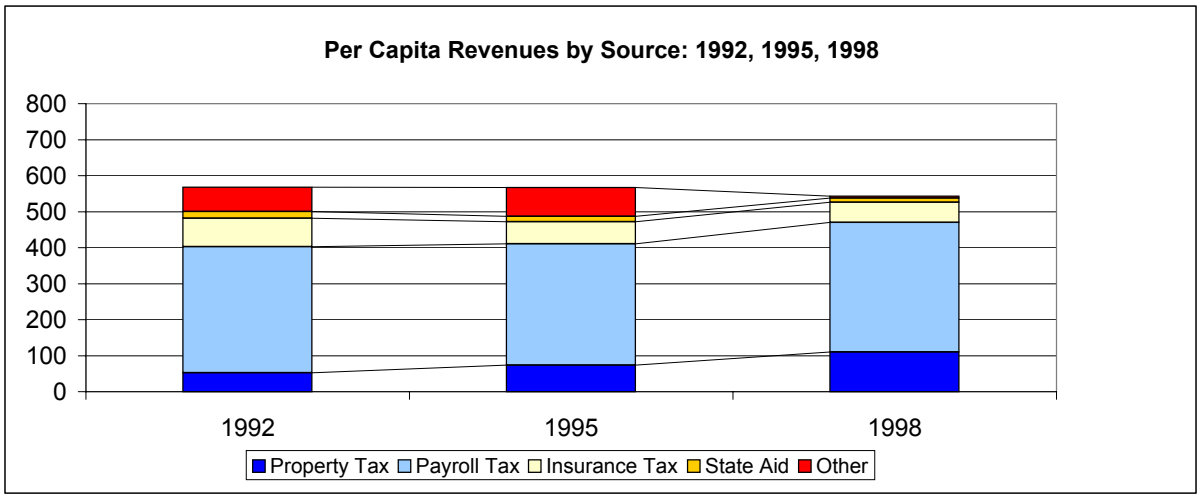


Chart 20: Wilder





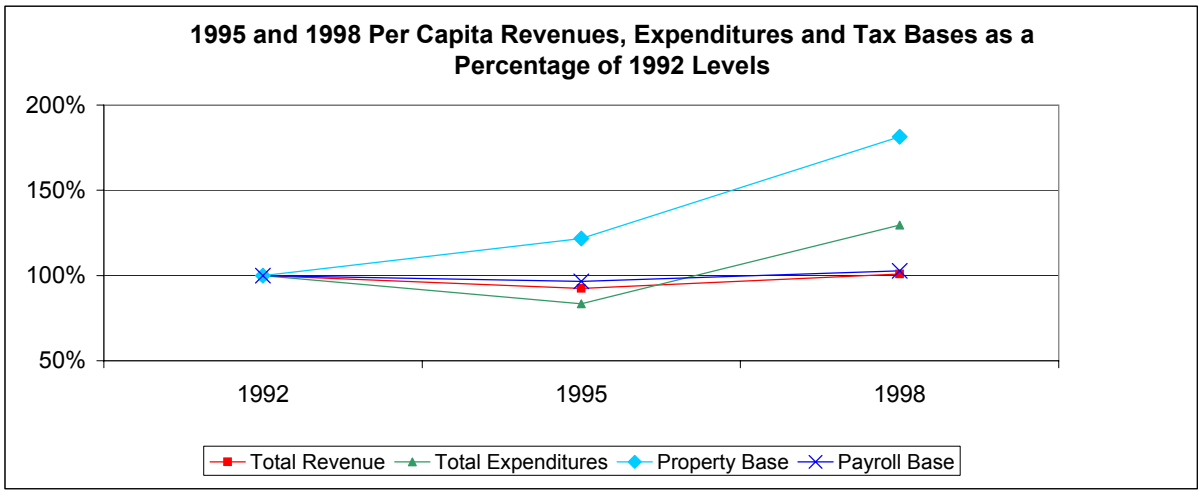
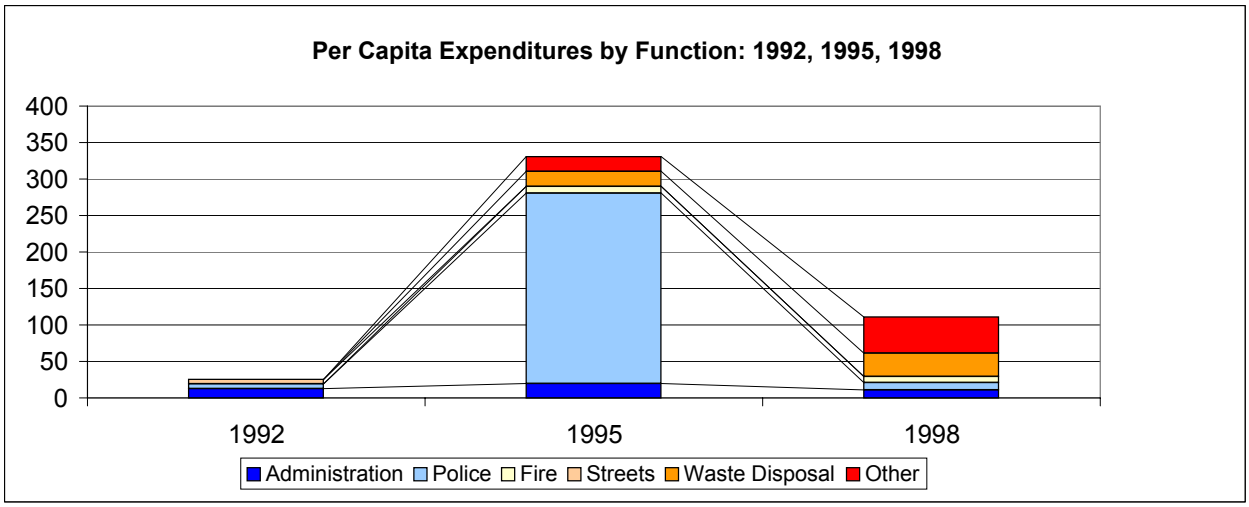
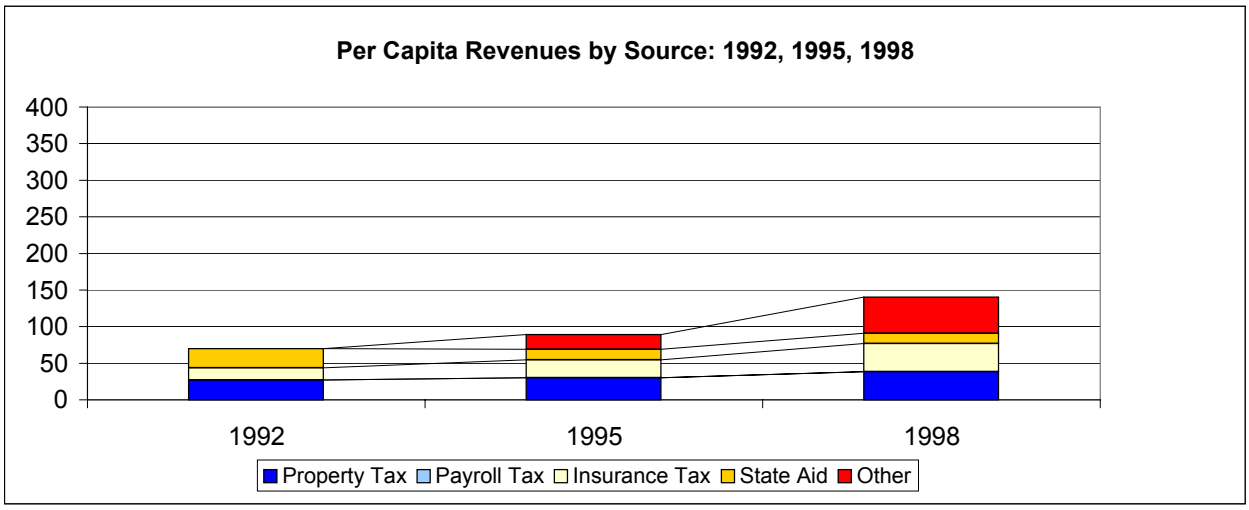


Chart 21: Woodlawn





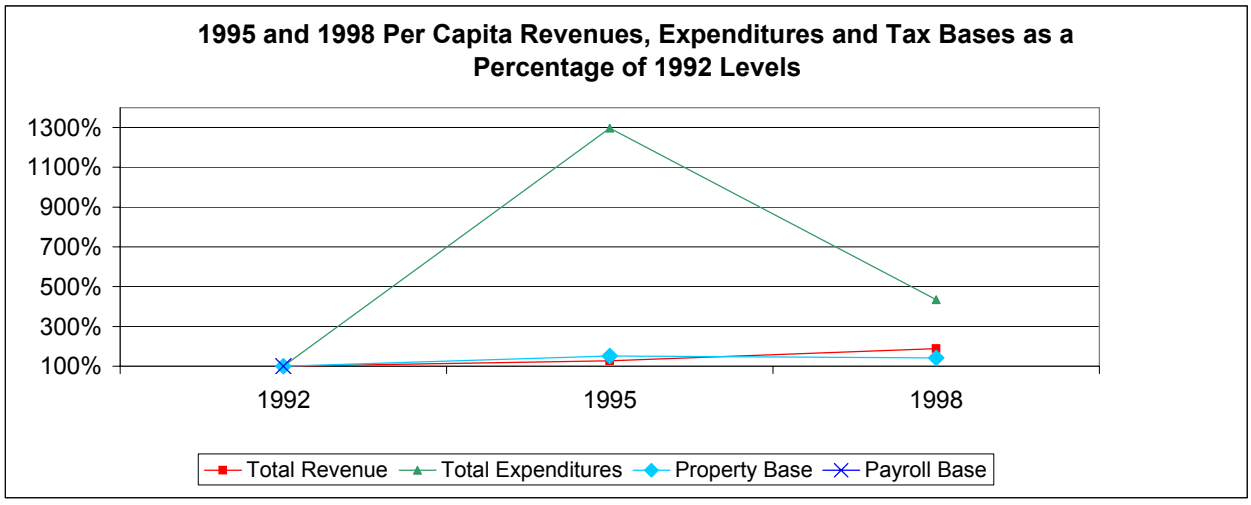
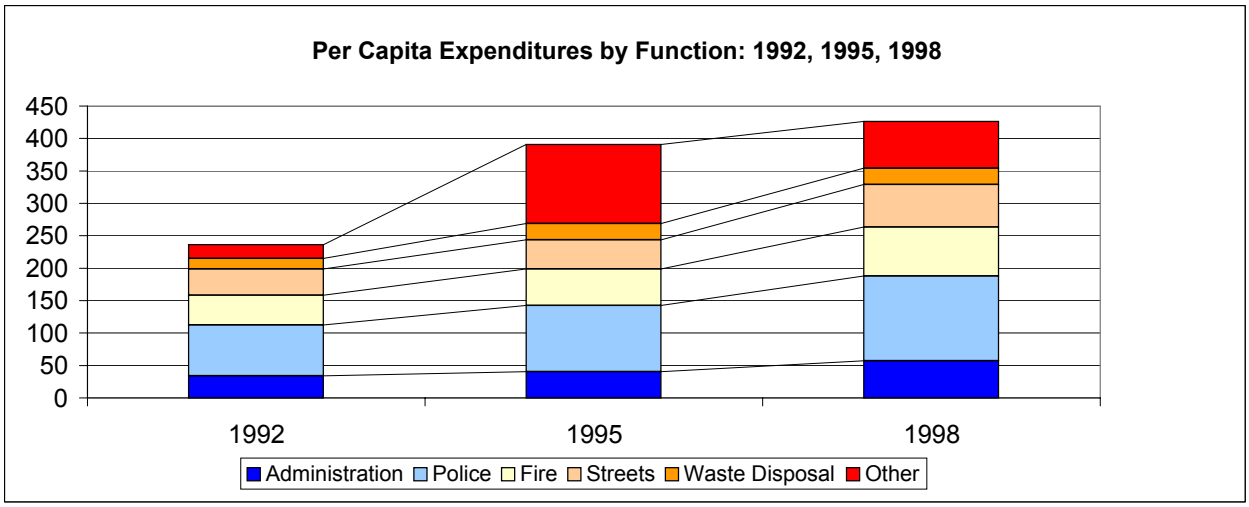
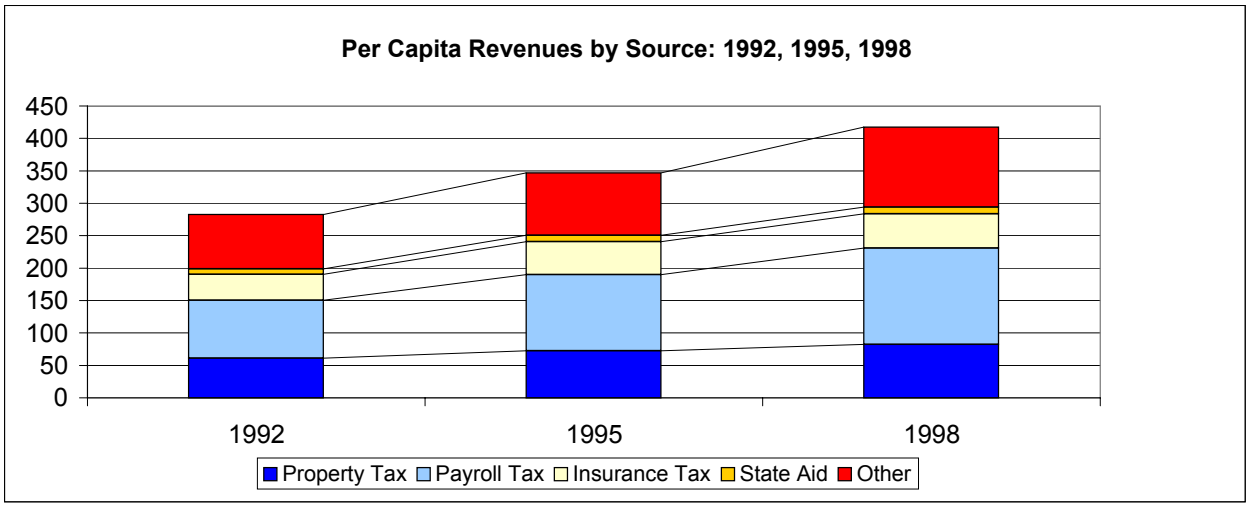


Chart 22: Kenton County Total





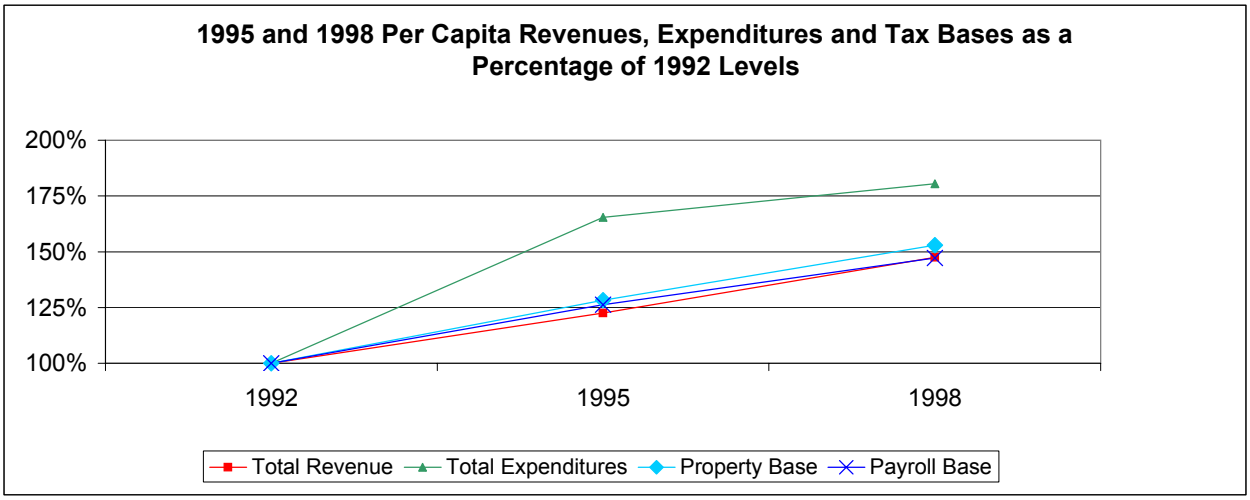
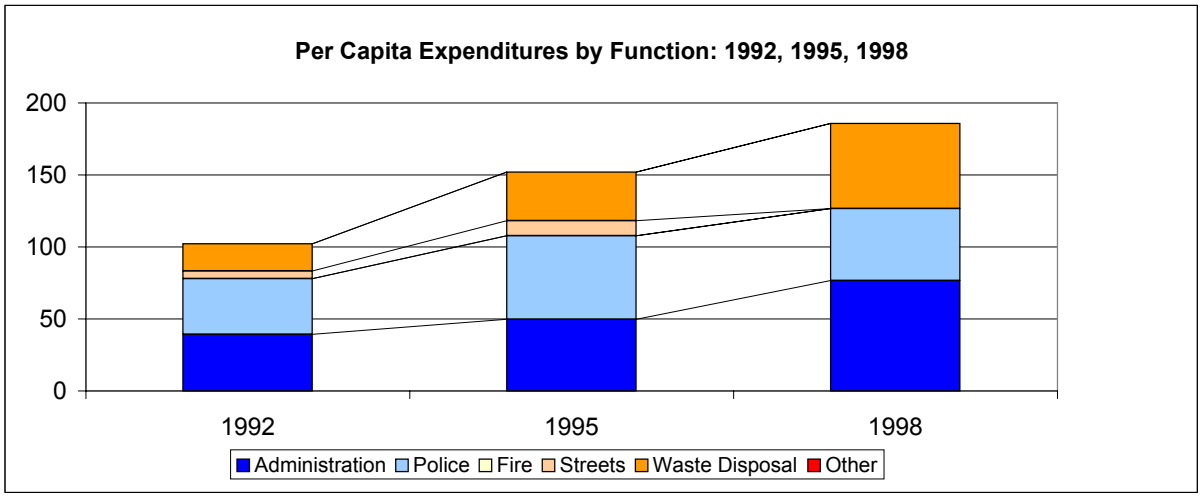
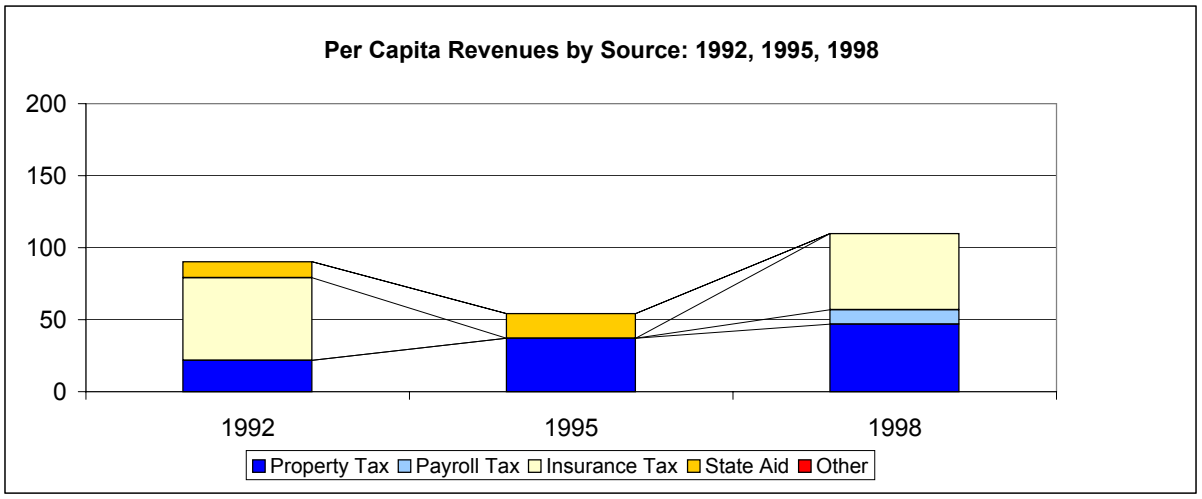


Chart 23: Bromley





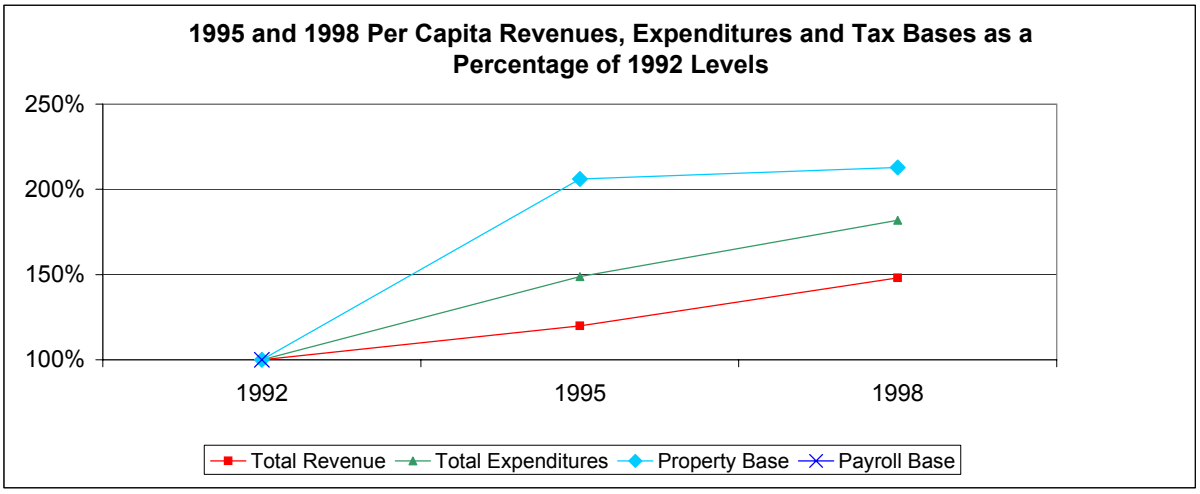
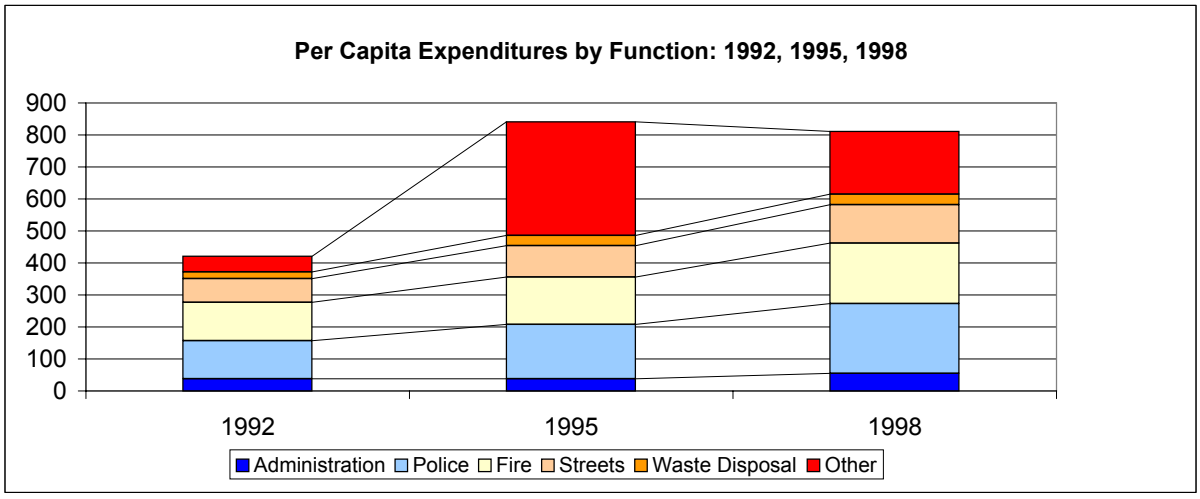
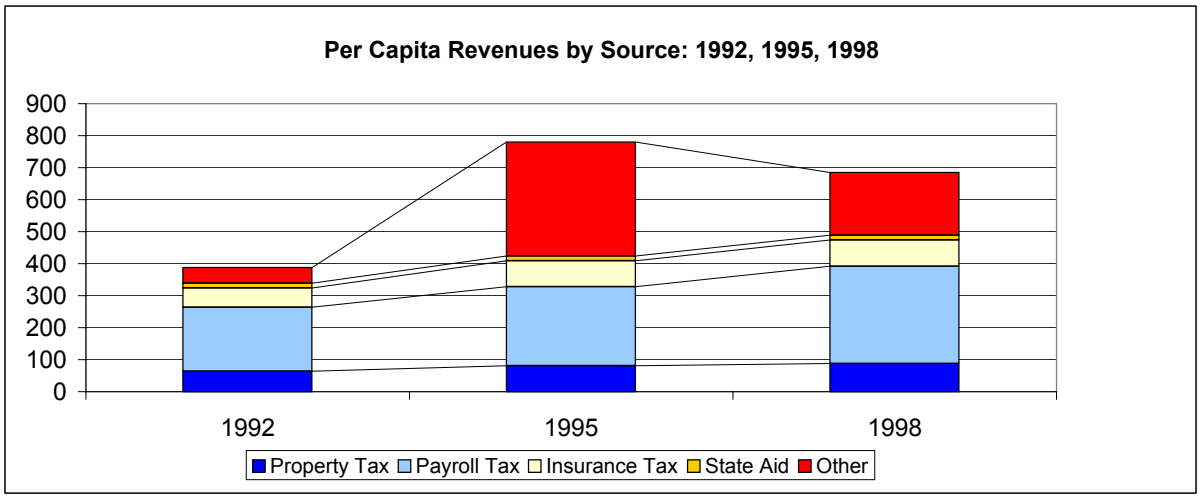


Chart 24: Covington





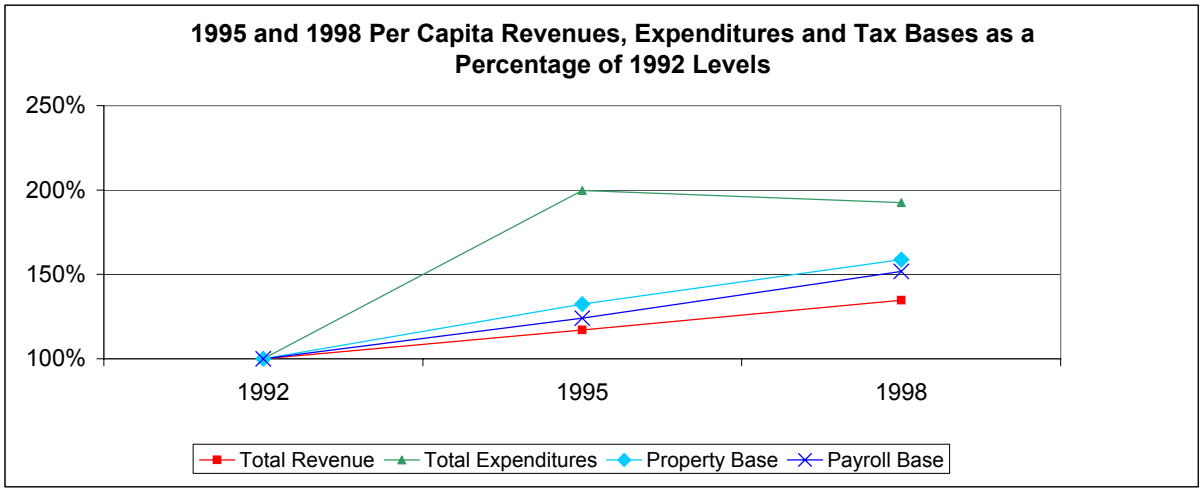
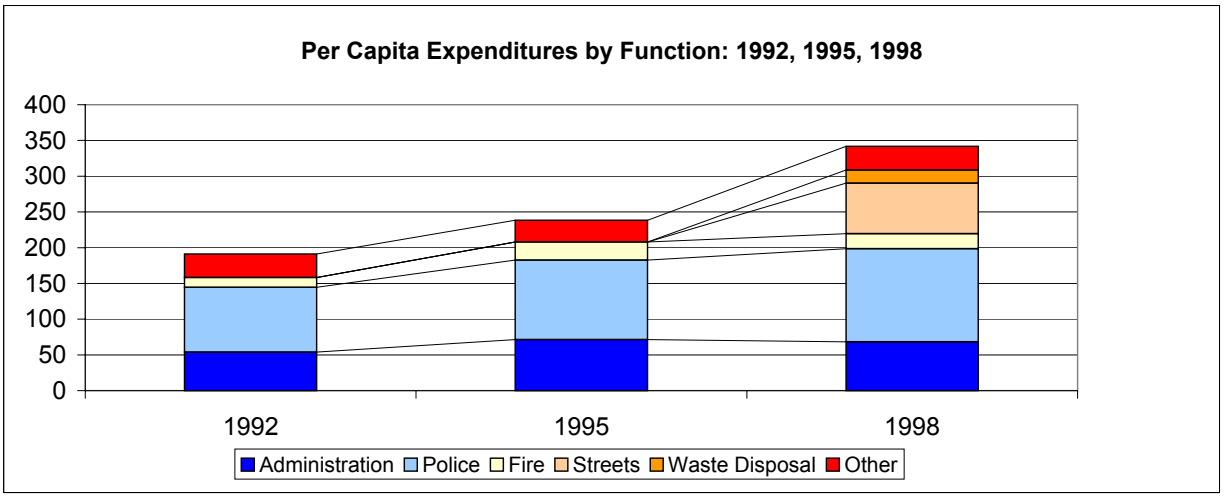
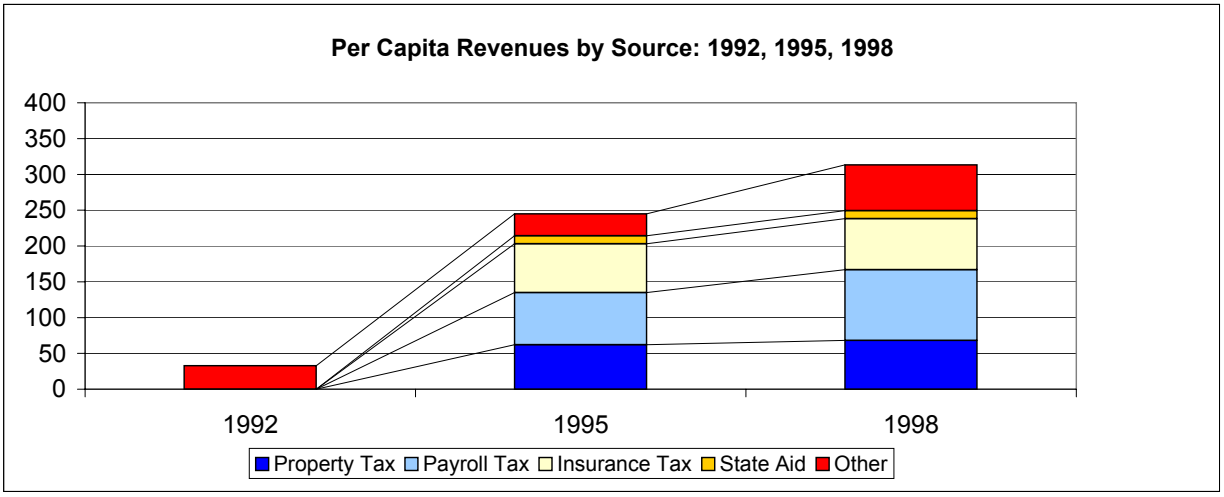


Chart 25: Crescent Springs





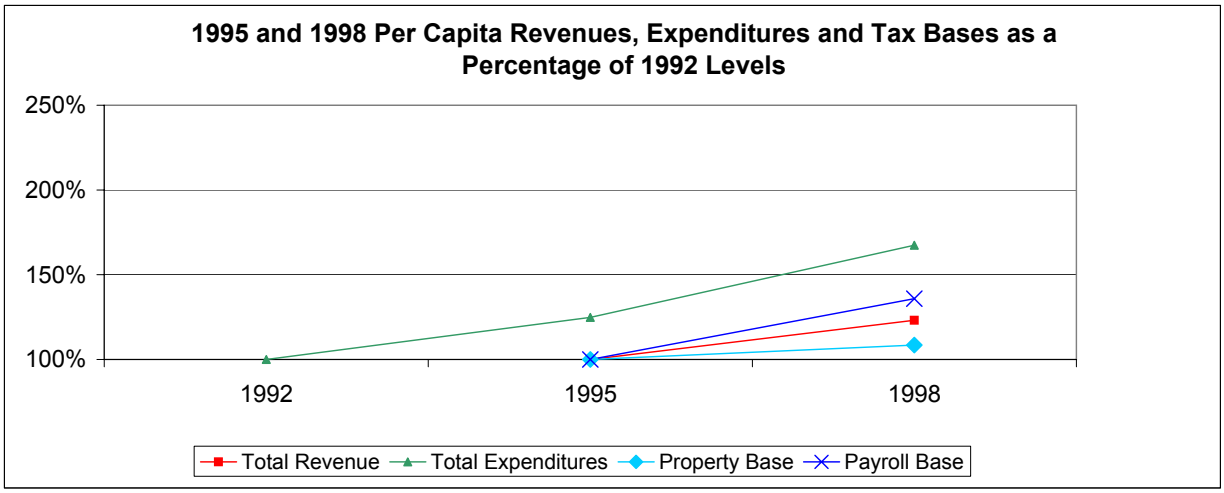
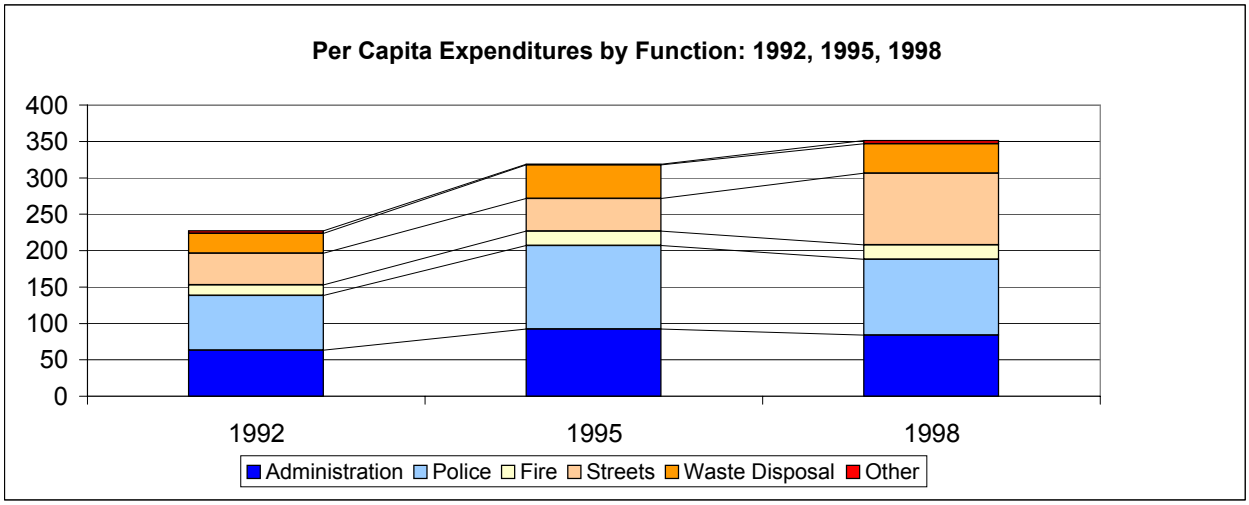
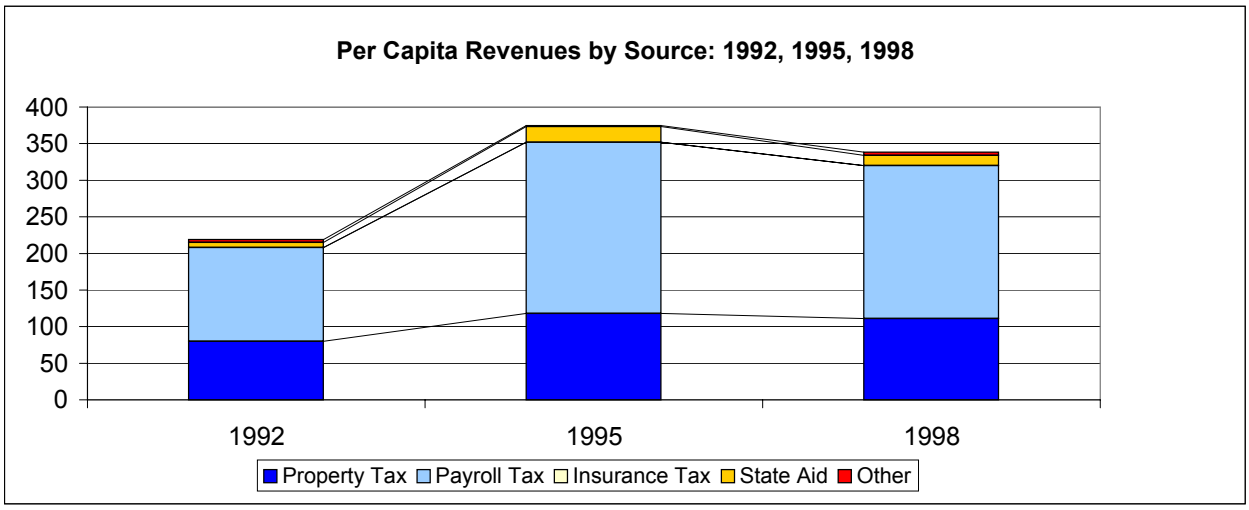


Chart 26: Crestview Hill





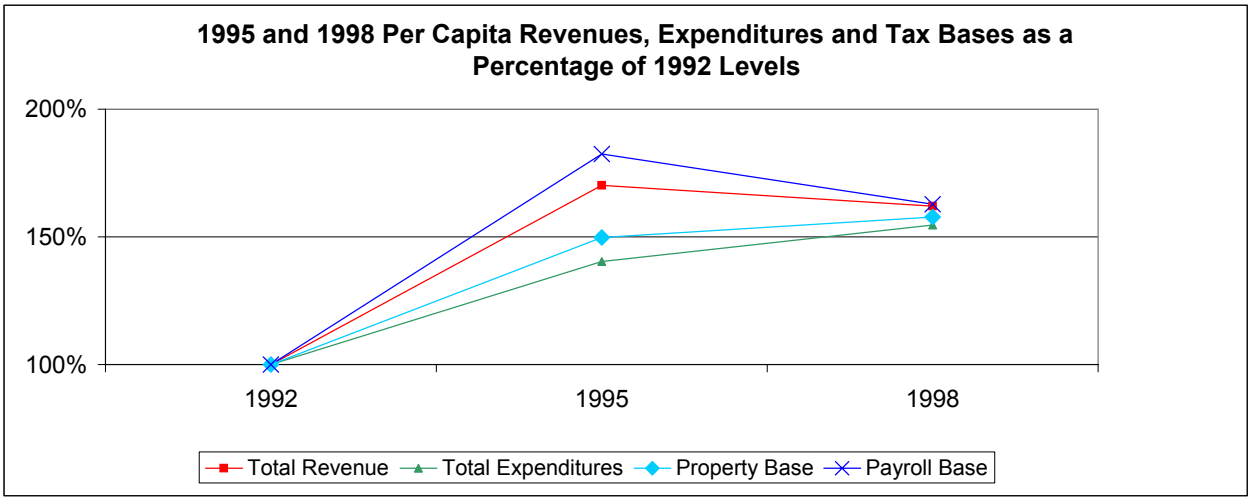
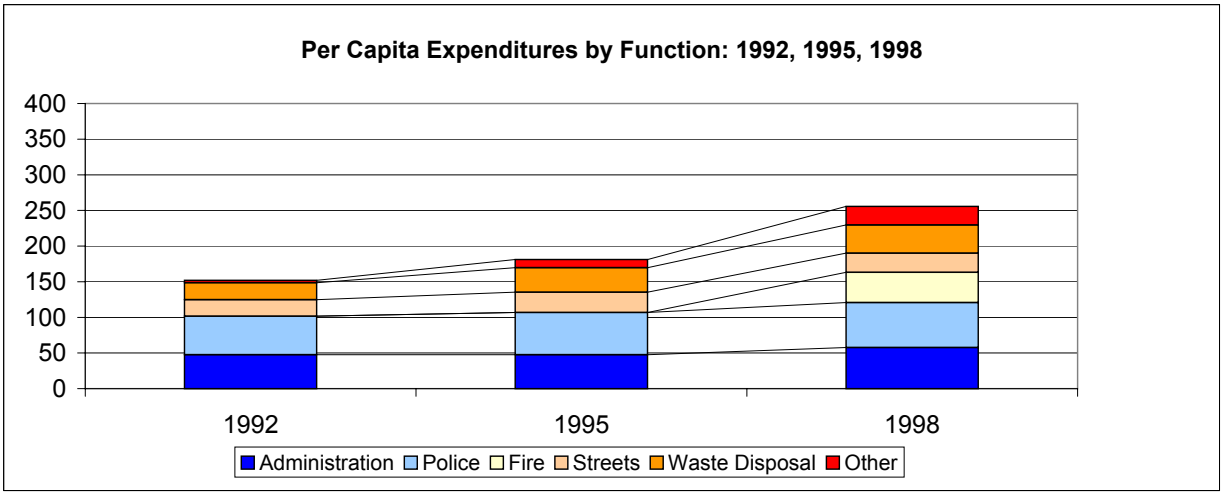
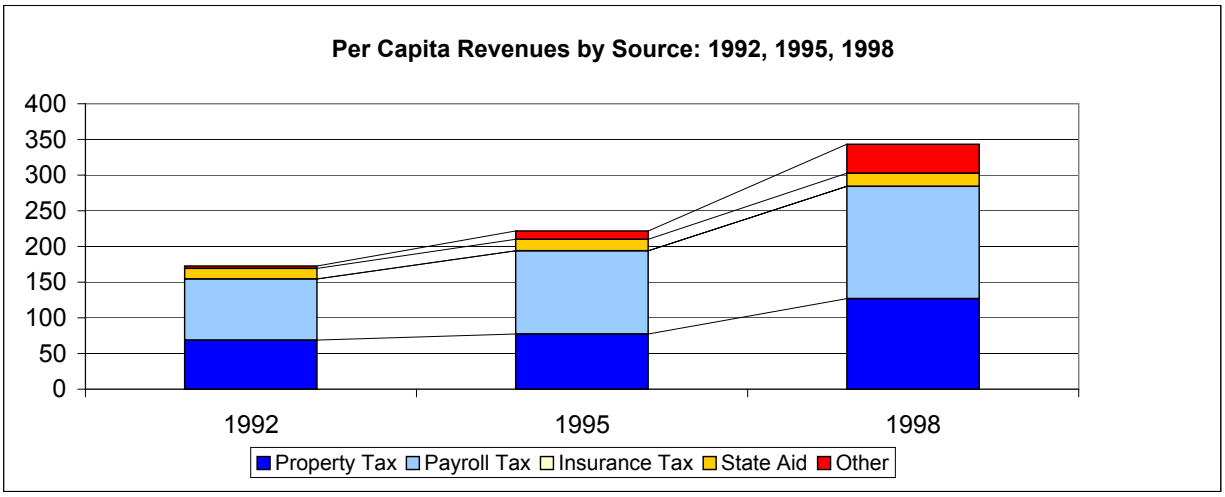


Chart 27: Edgewood





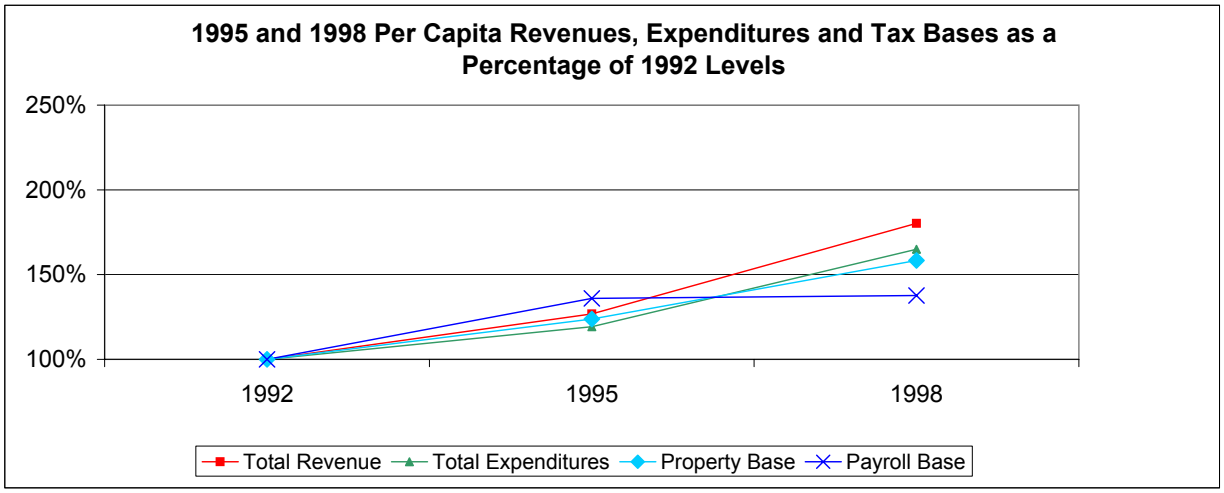
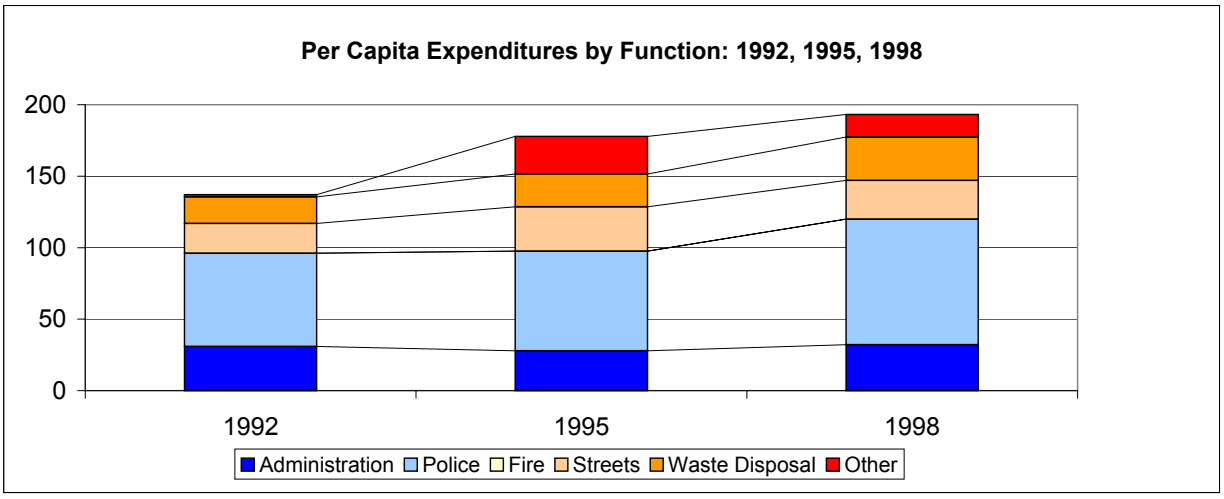
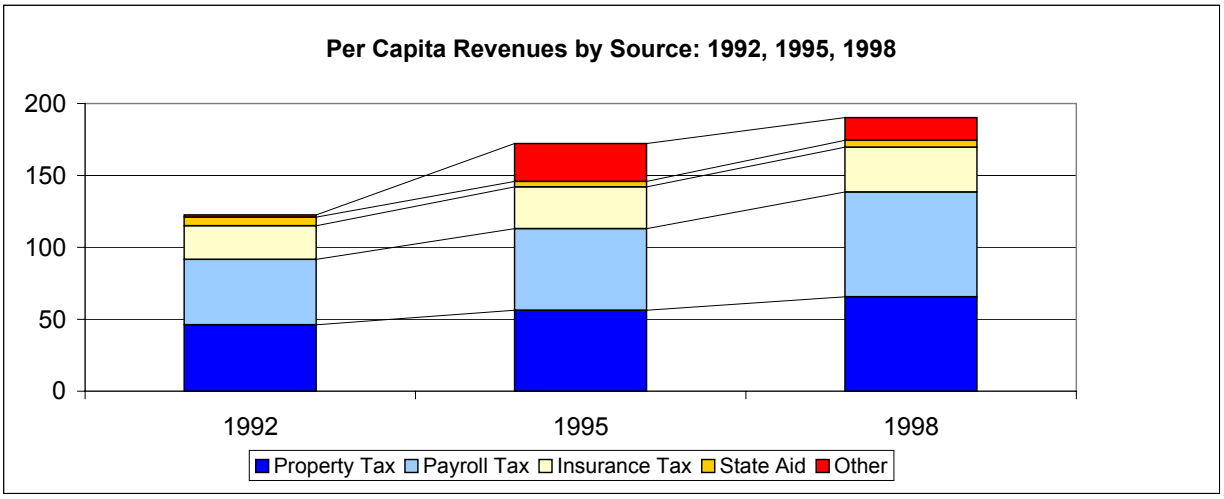


Chart 28: Elsmere





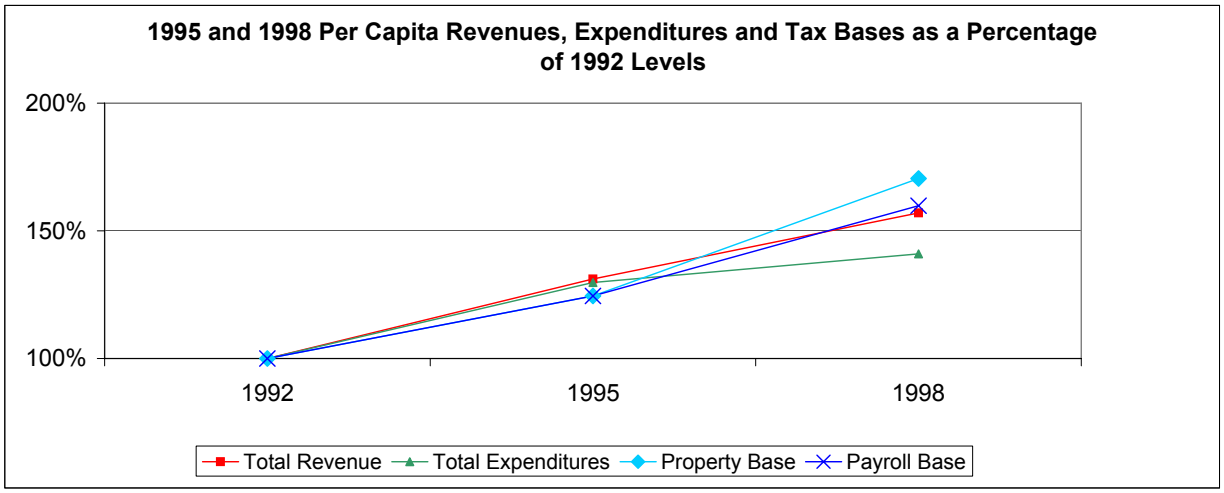
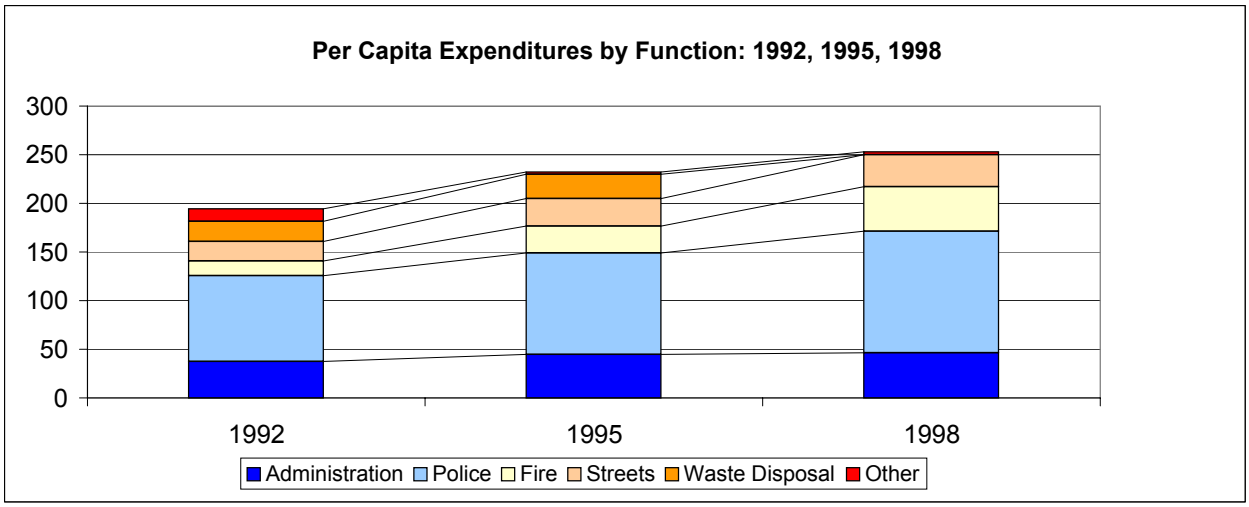
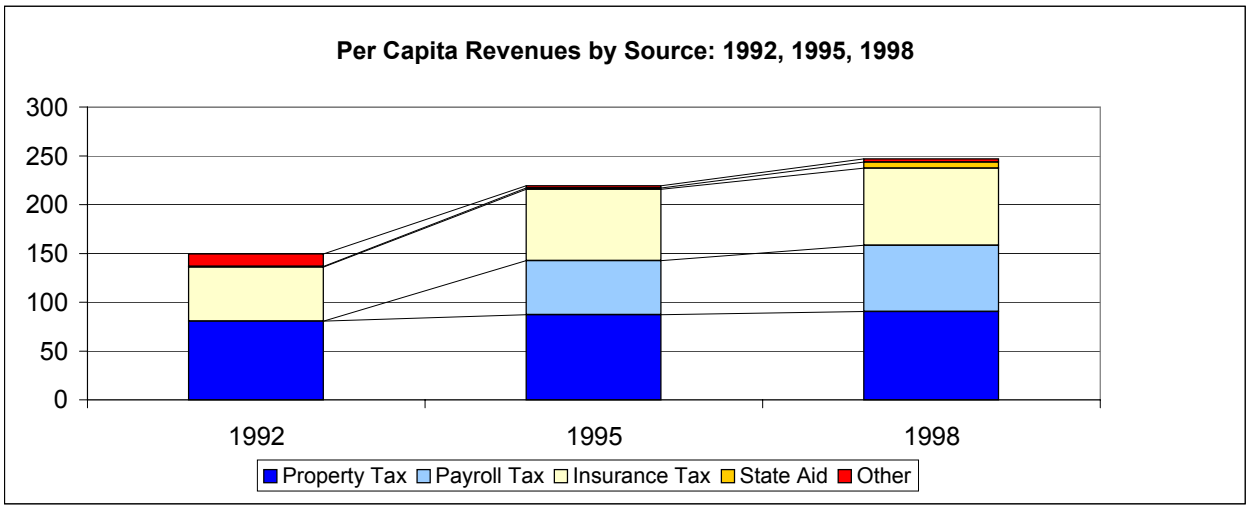


Chart 29: Erlanger





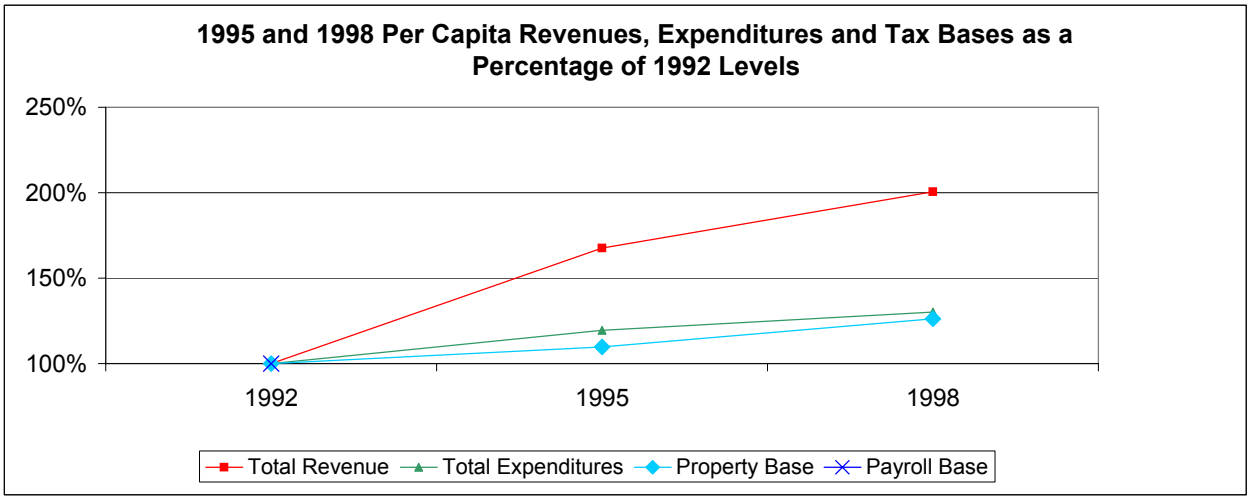
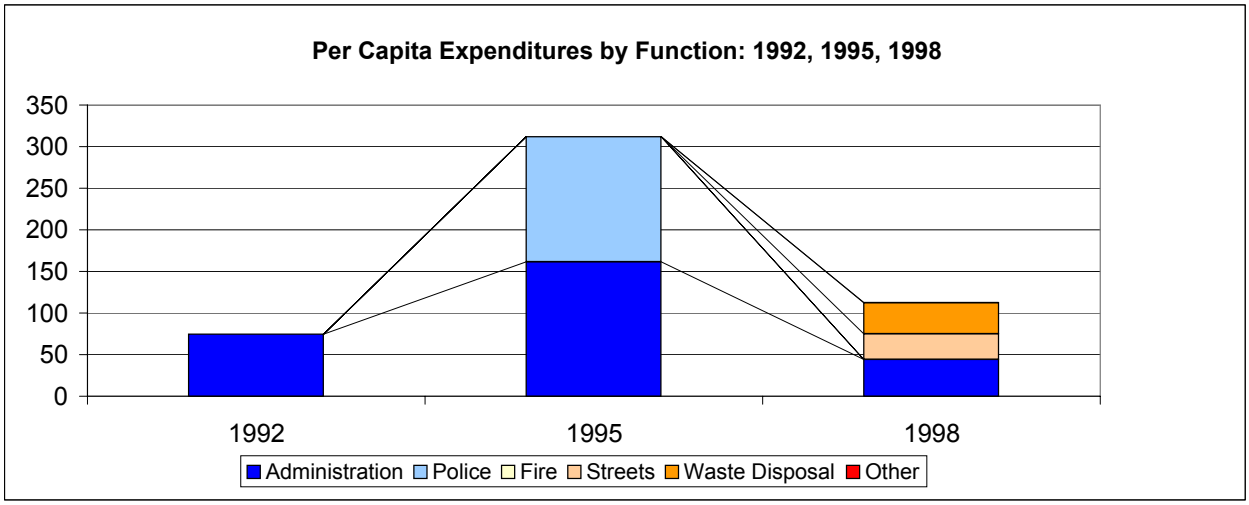
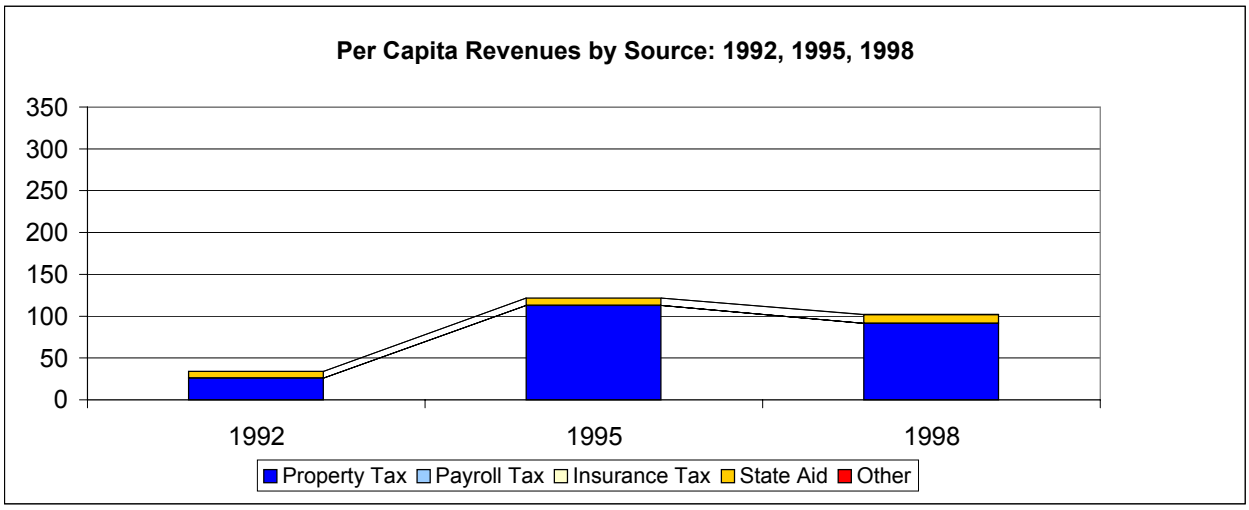


Chart 30: Fairview





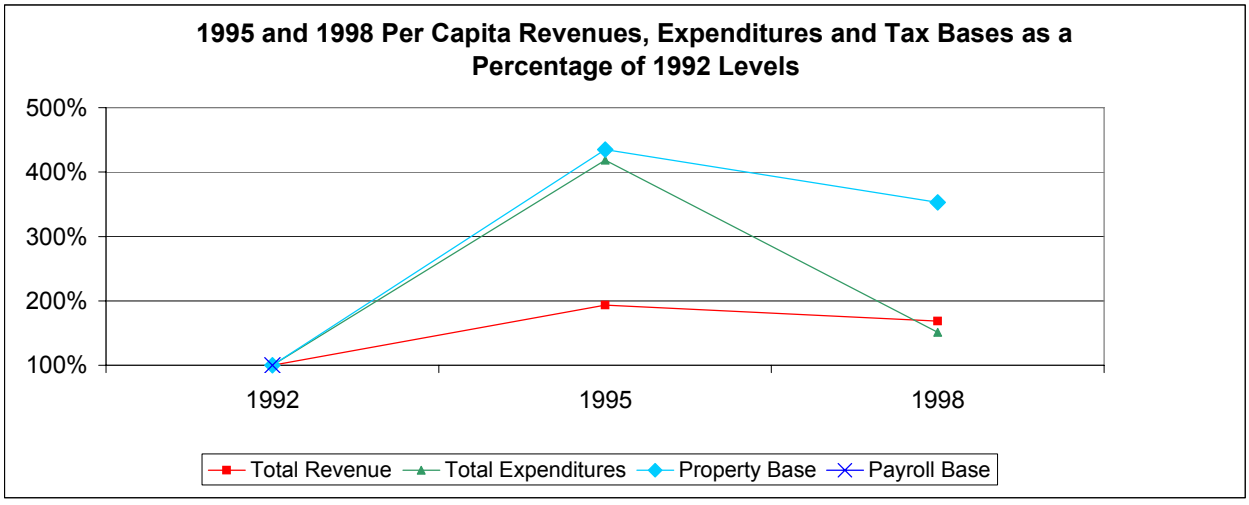
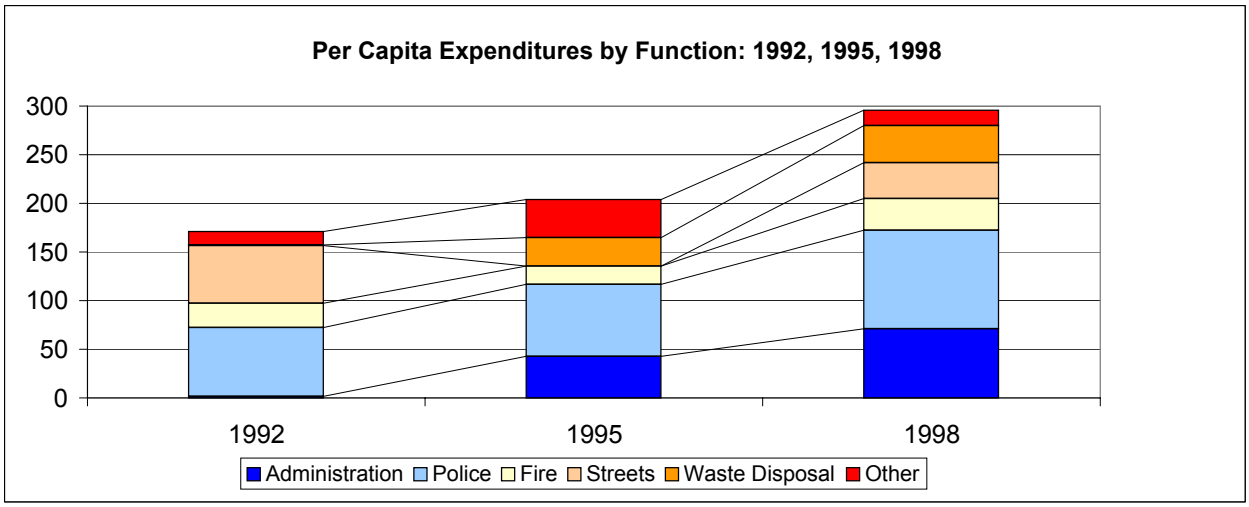
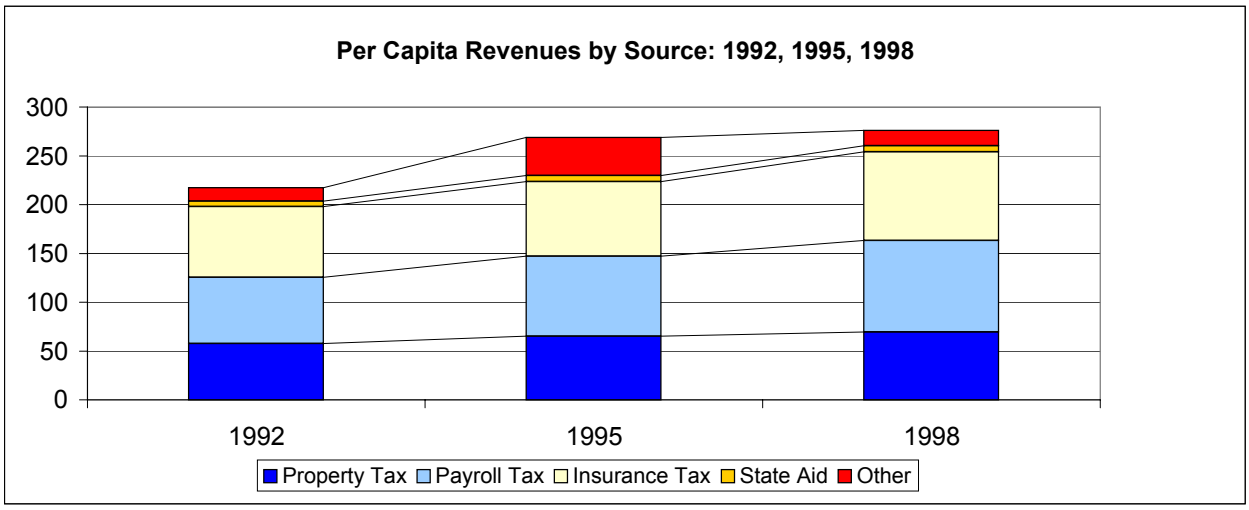


Chart 31: Fort Mitchell





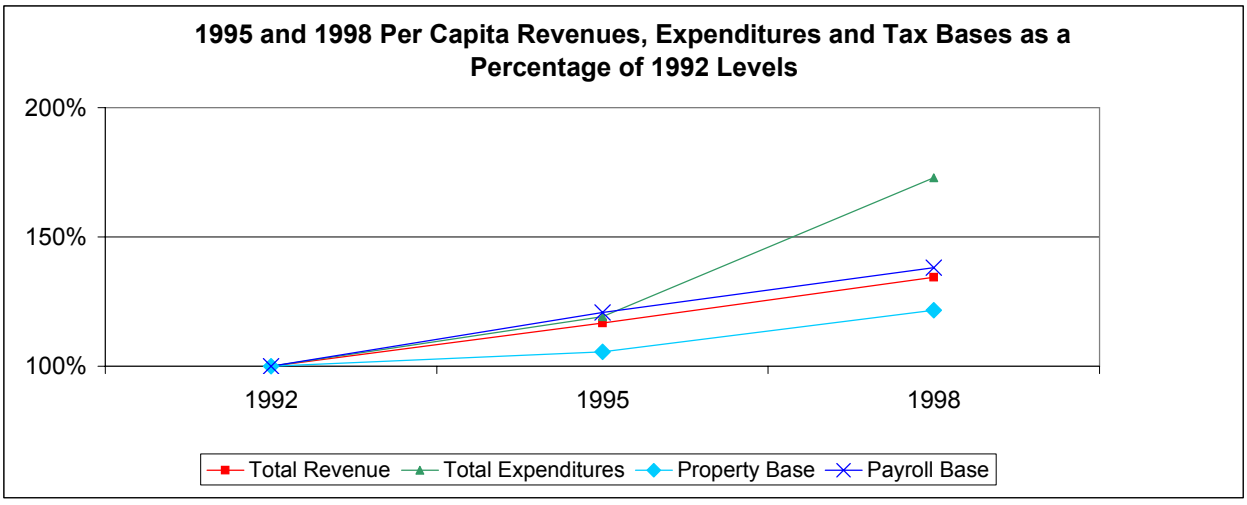
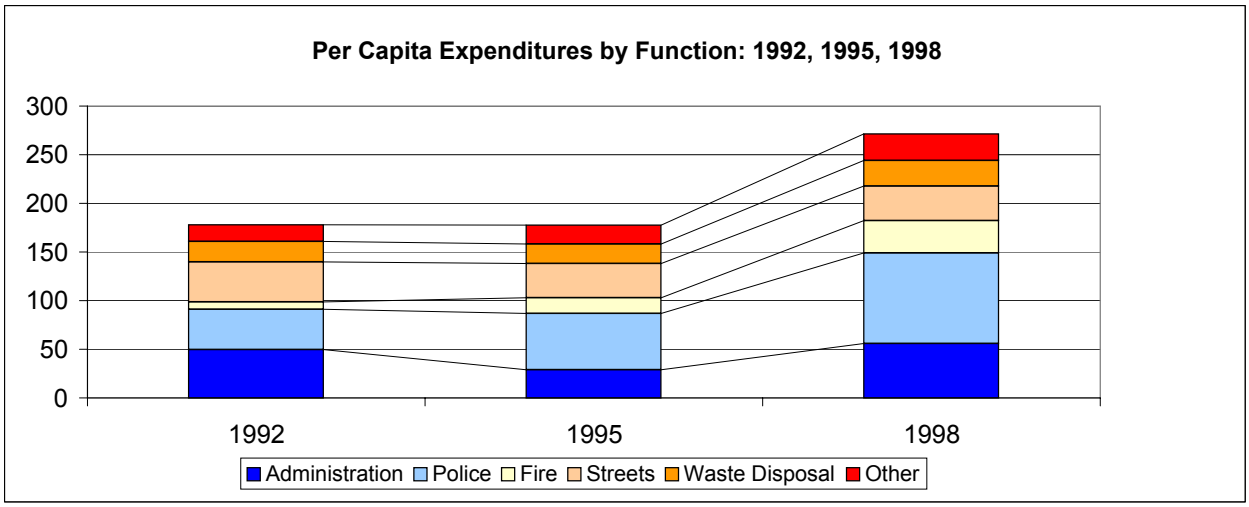
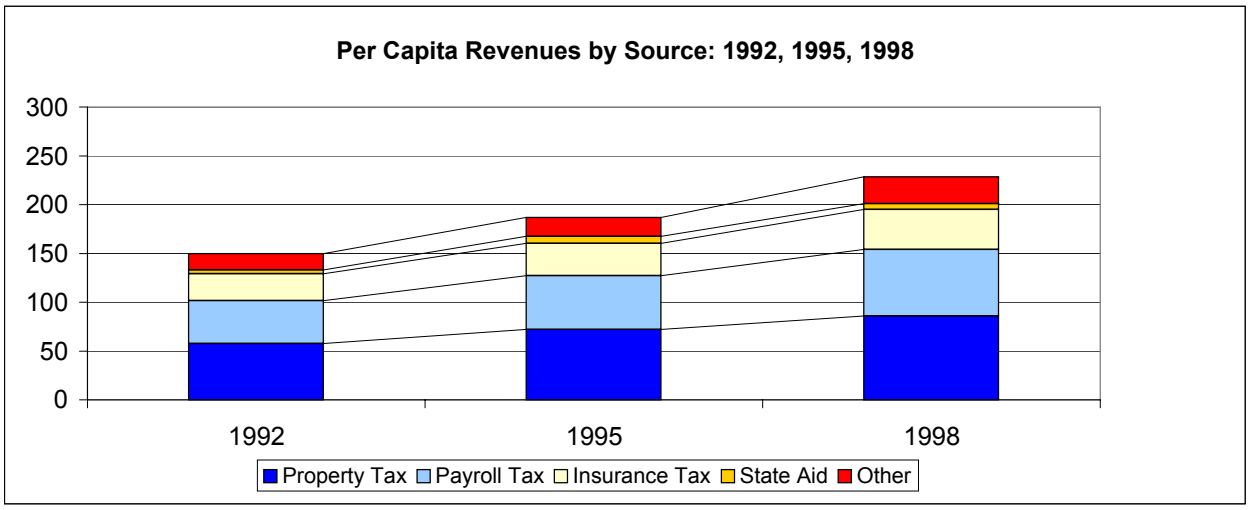


Chart 32: Fort Wright





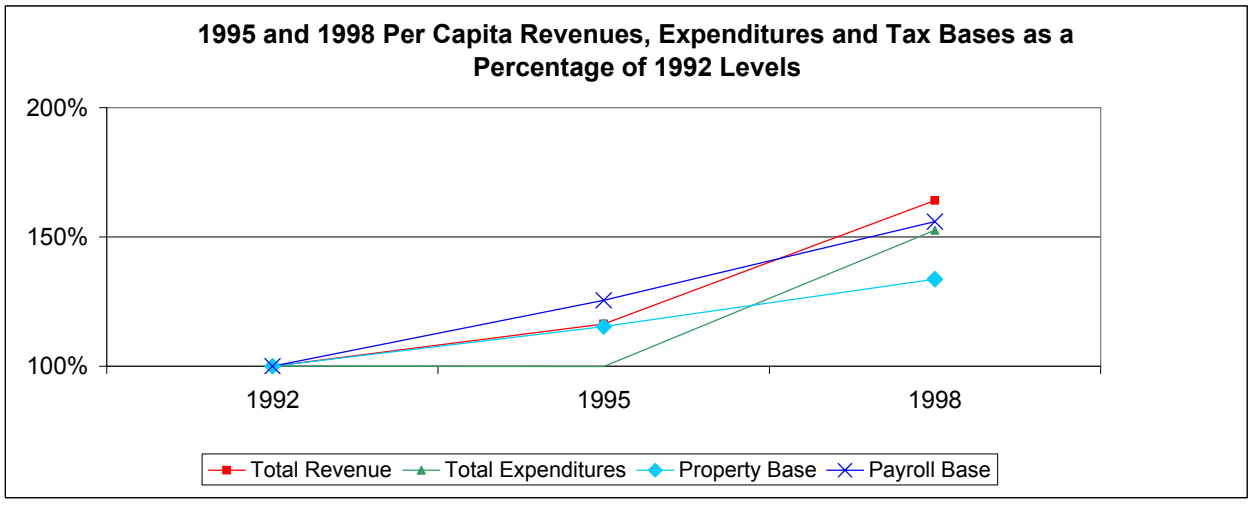
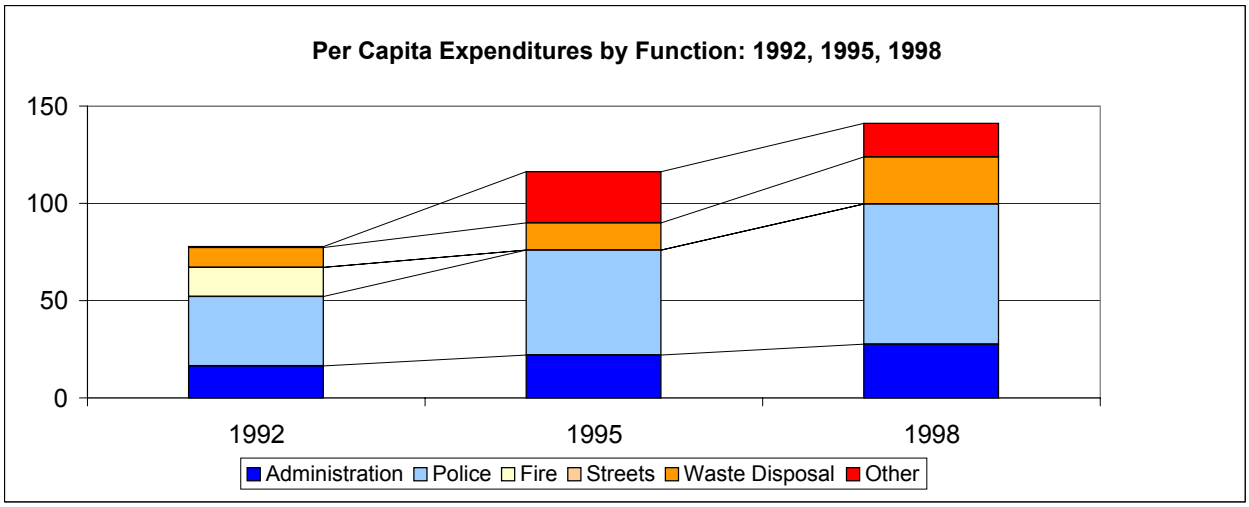
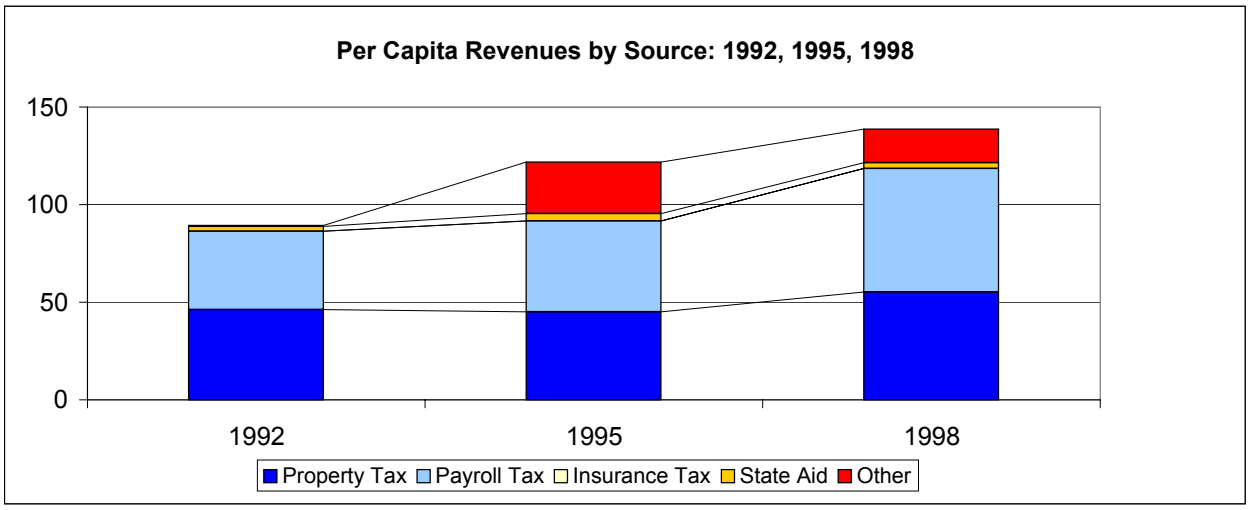


Chart 33: Independence





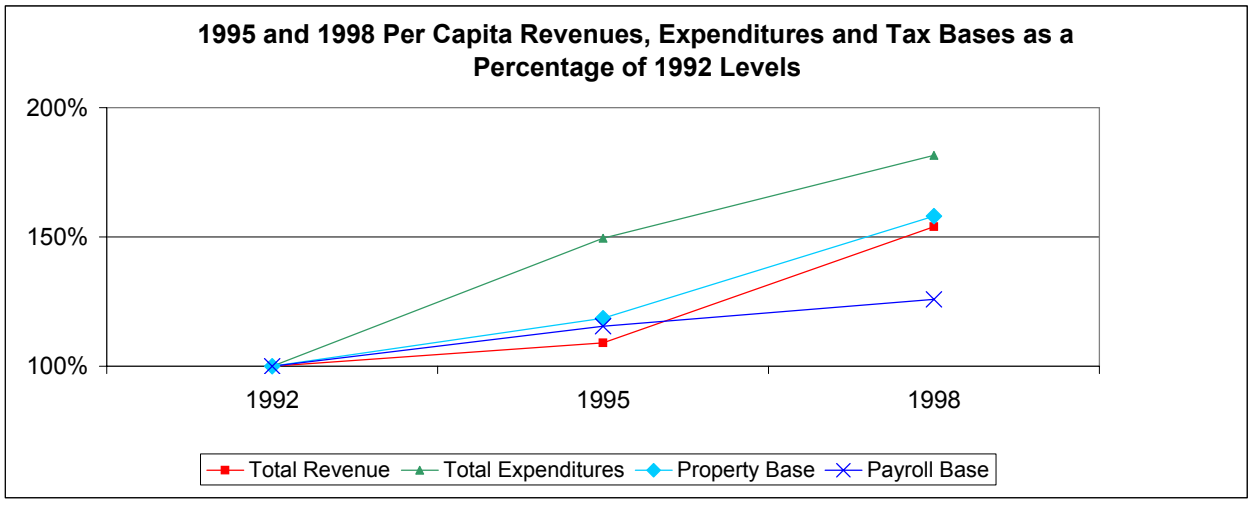
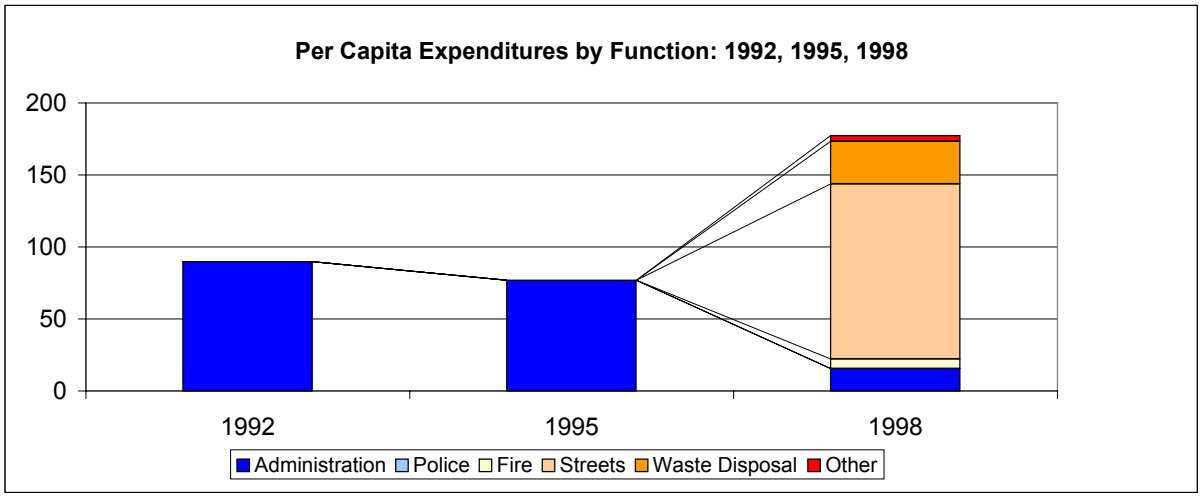
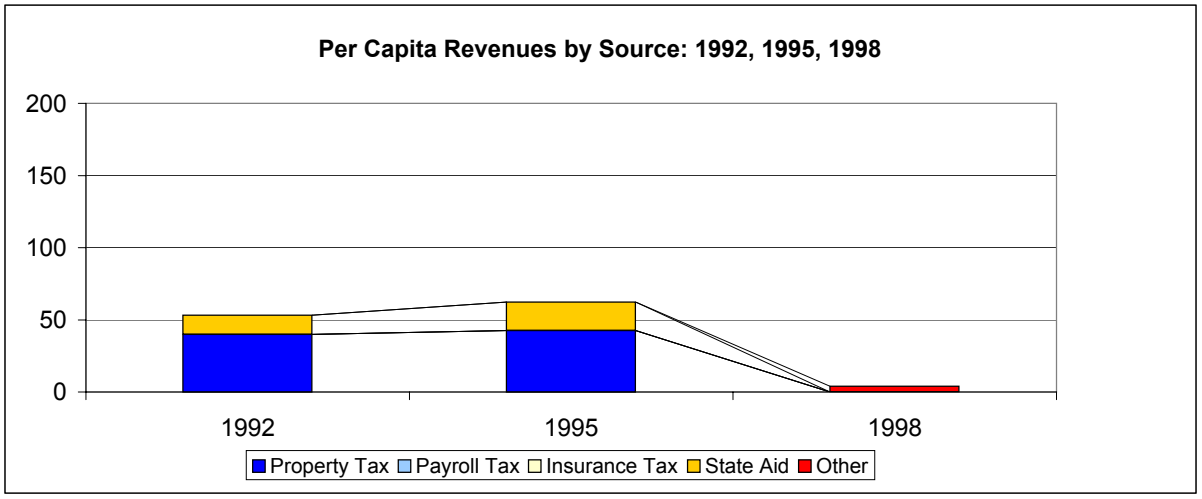


Chart 34: Kenton Vale





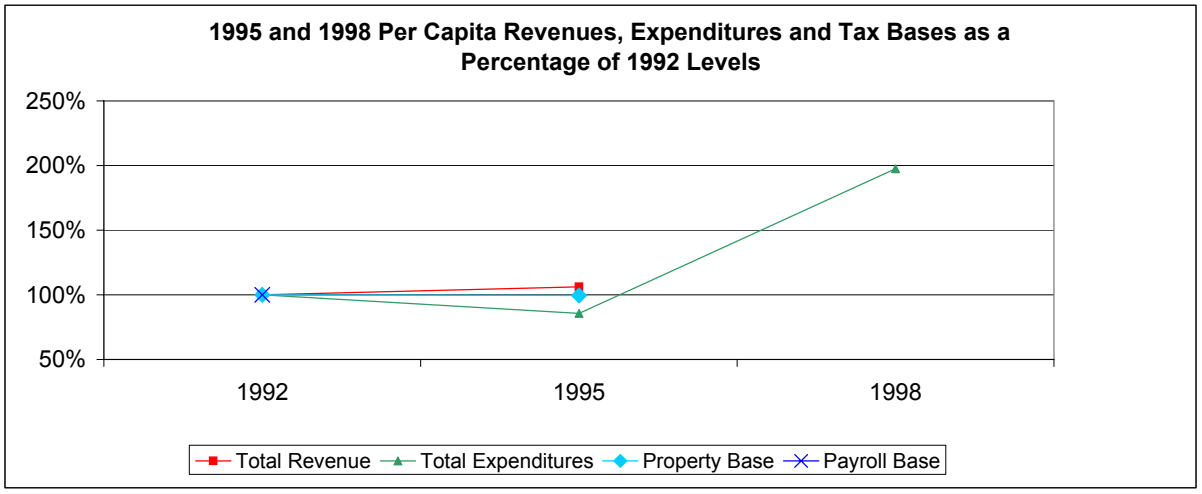
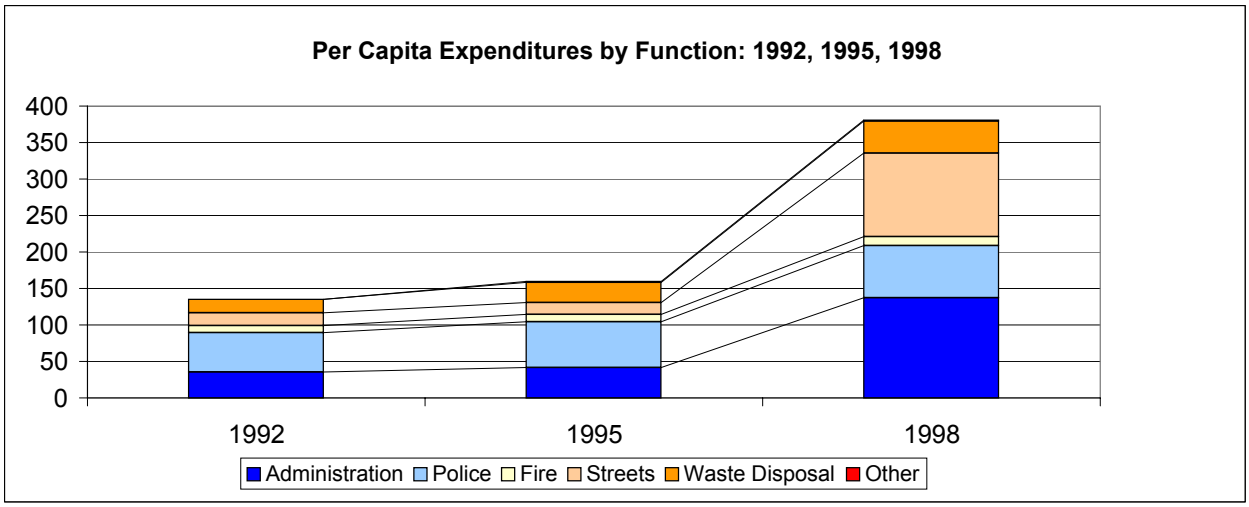
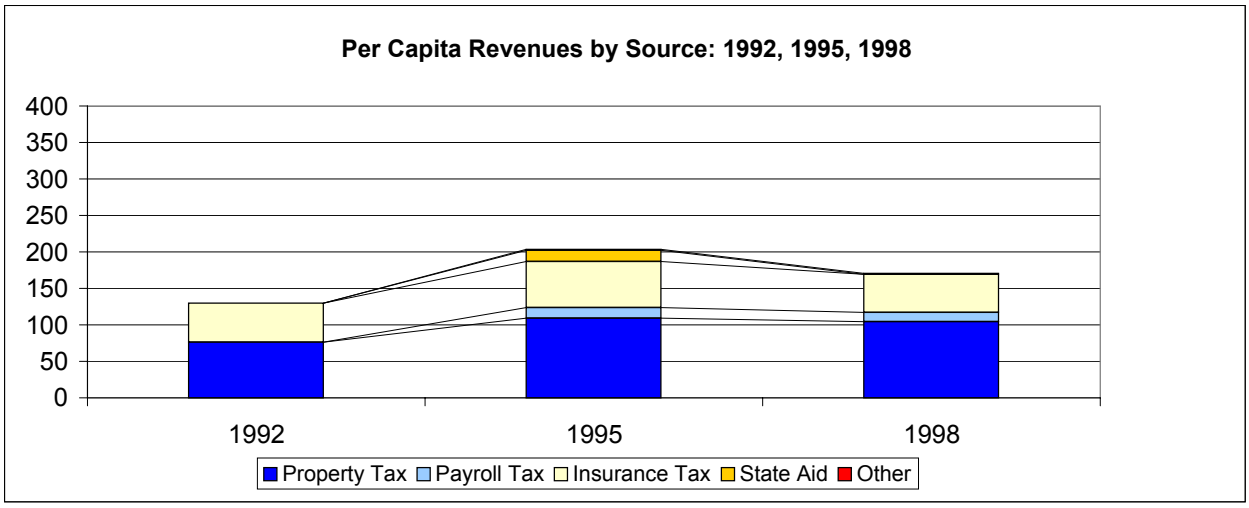


Chart 35: Lakeside Park





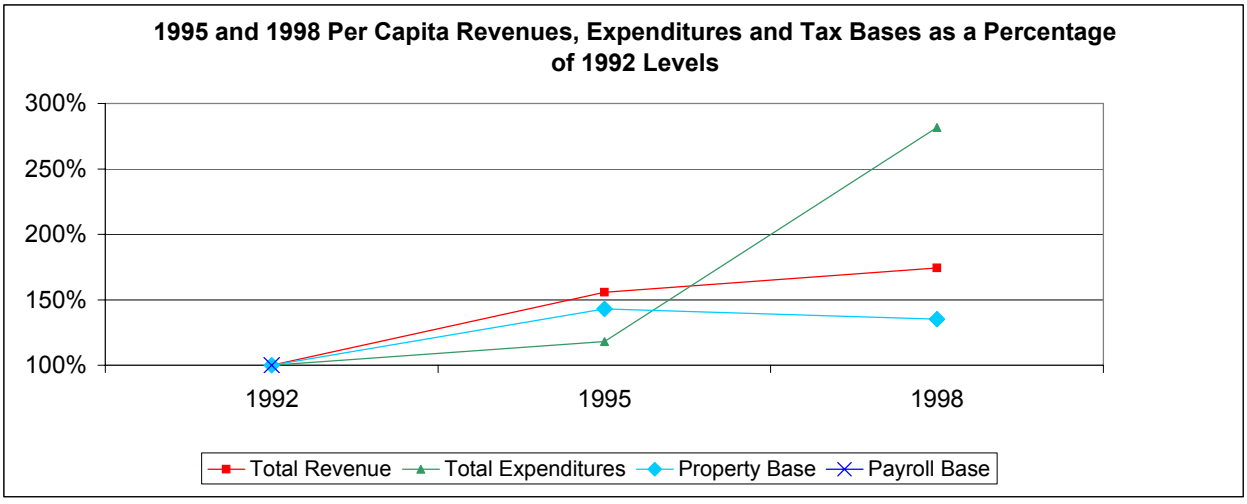
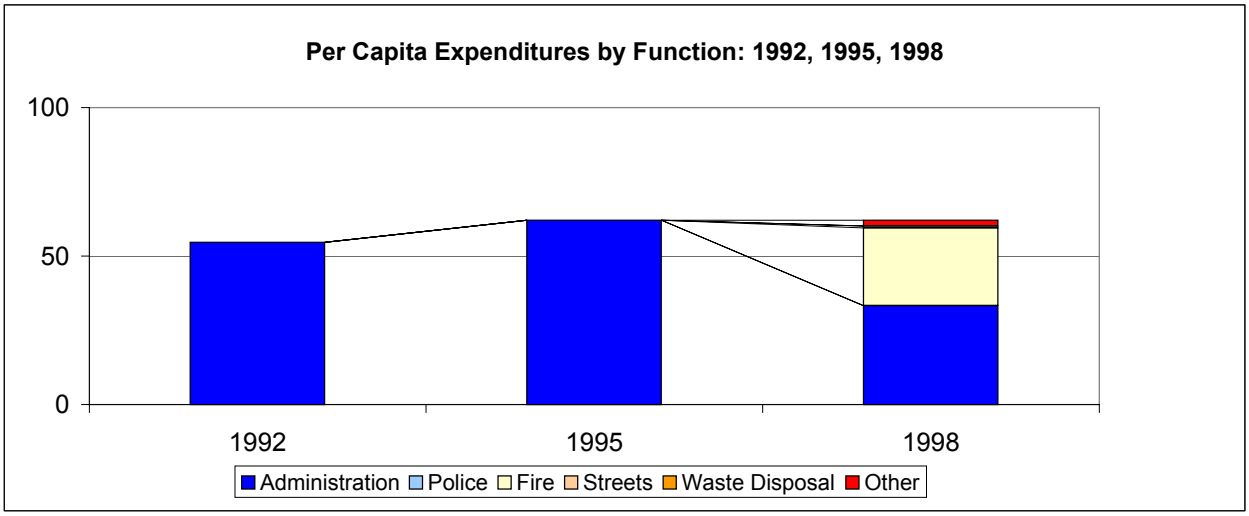
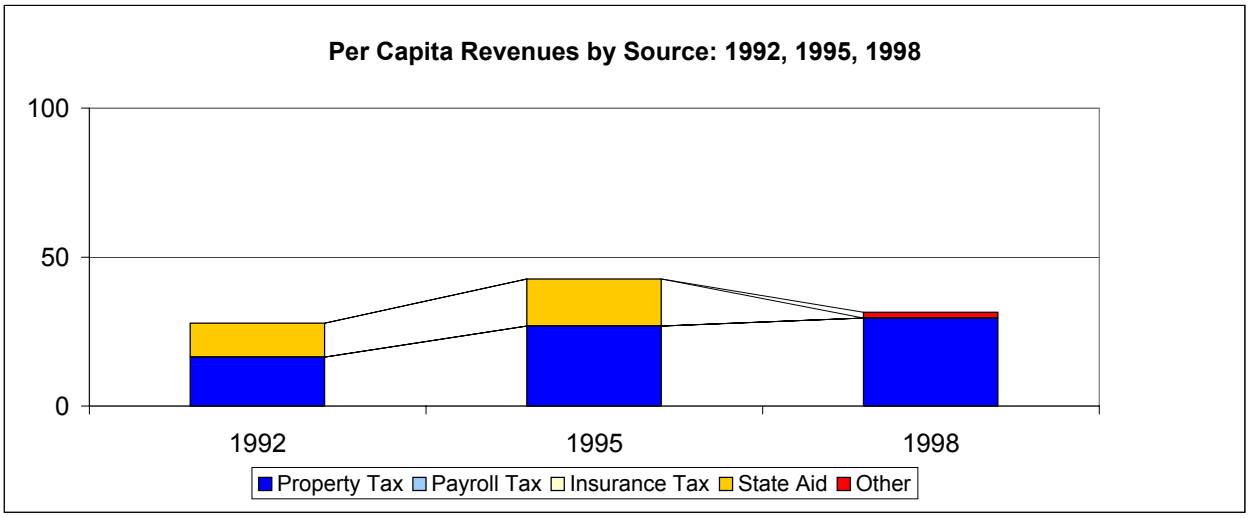


Chart 36: Latonia Lakes





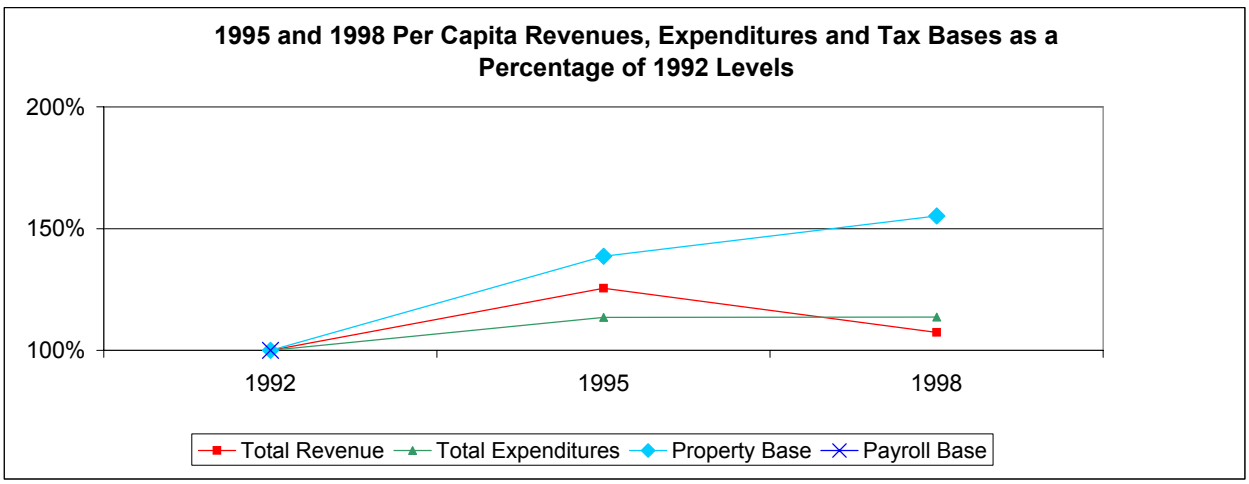
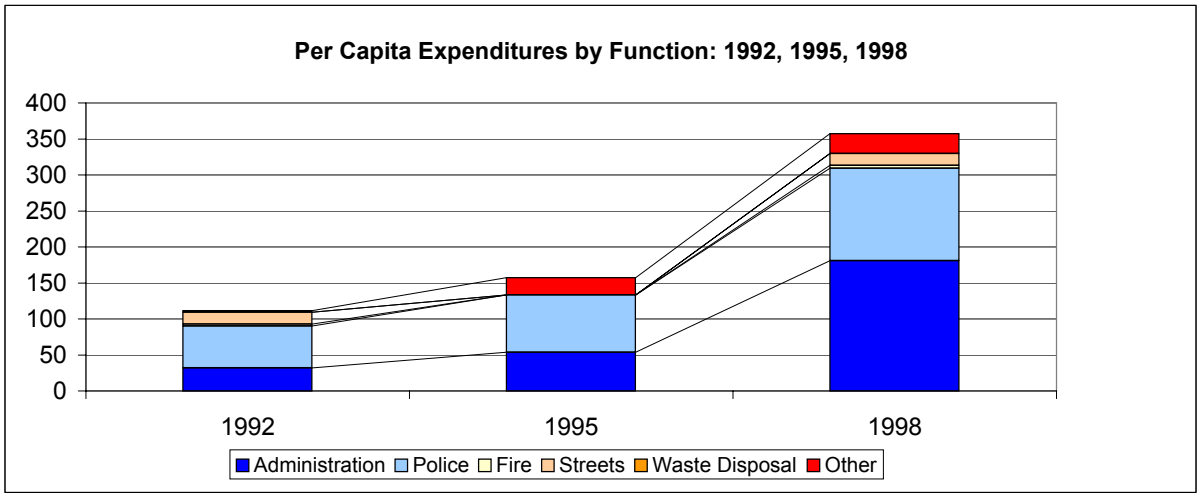
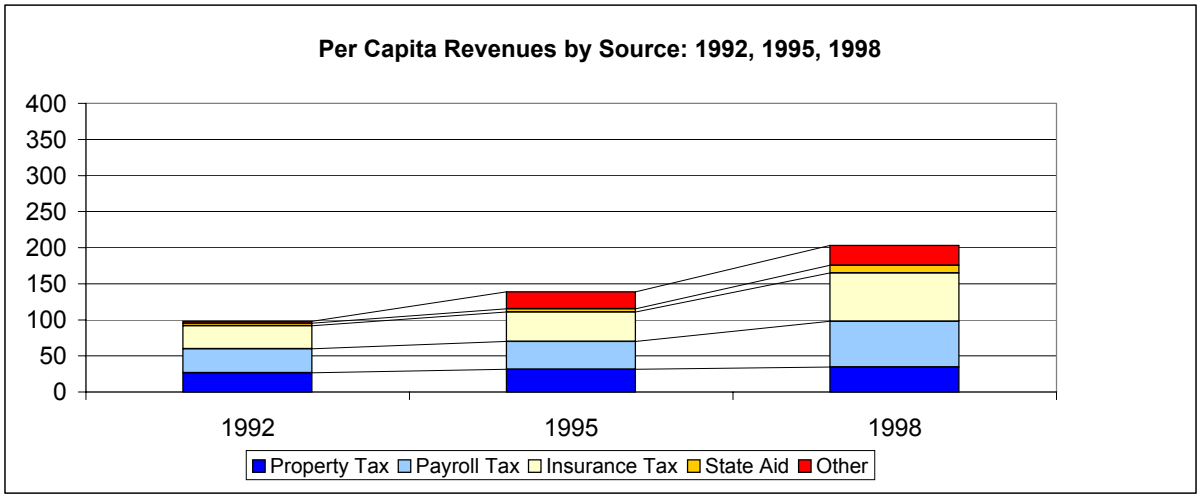


Chart 37: Ludlow





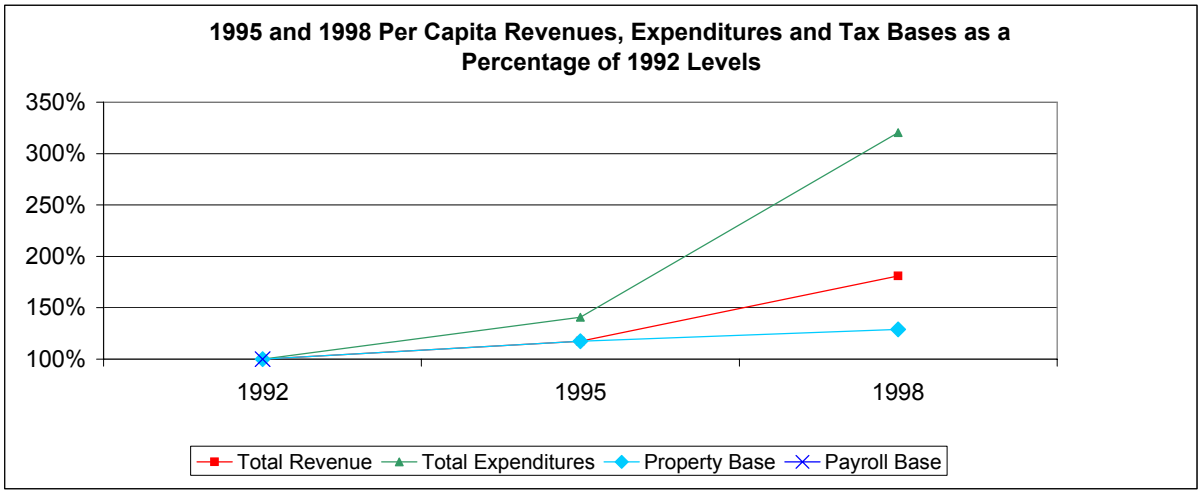
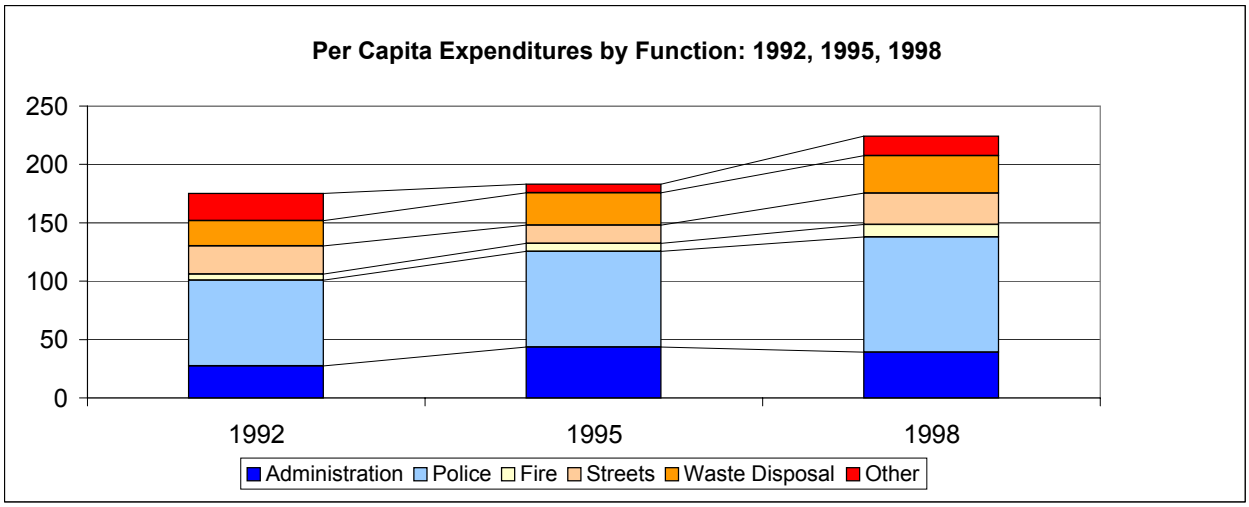
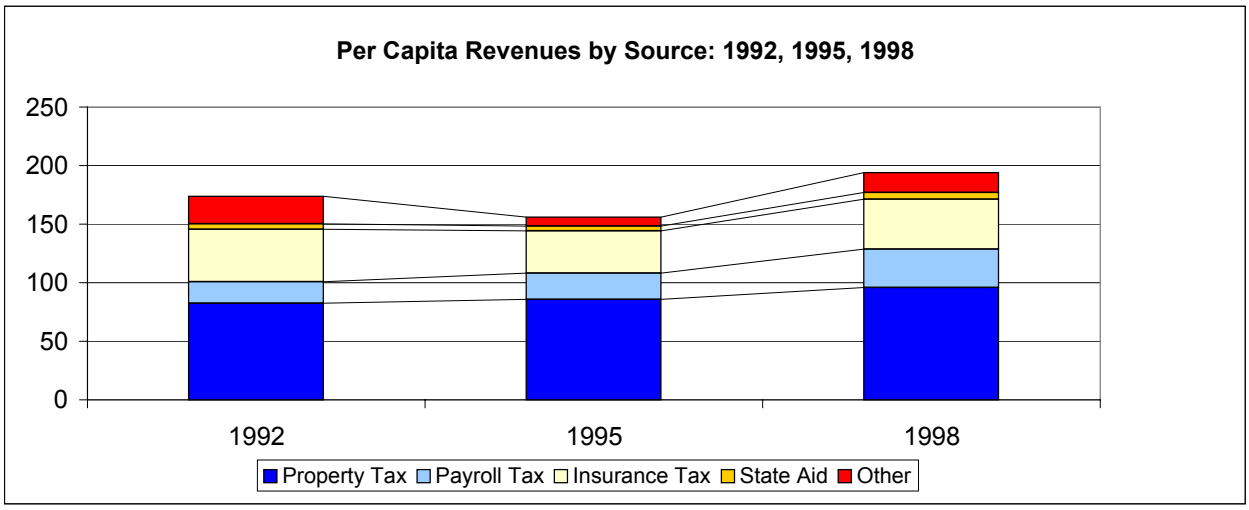


Chart 38: Park Hills





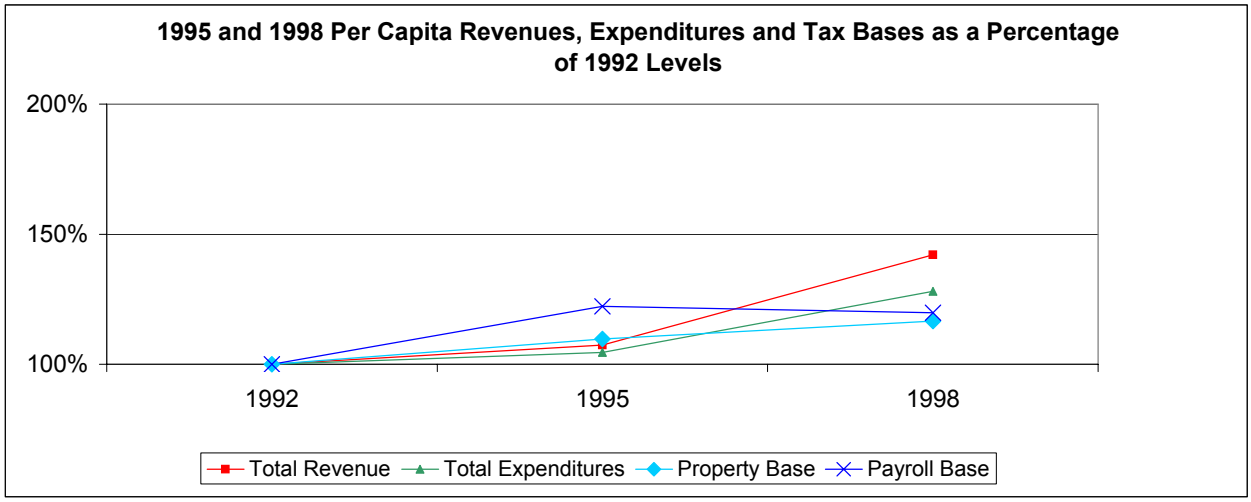
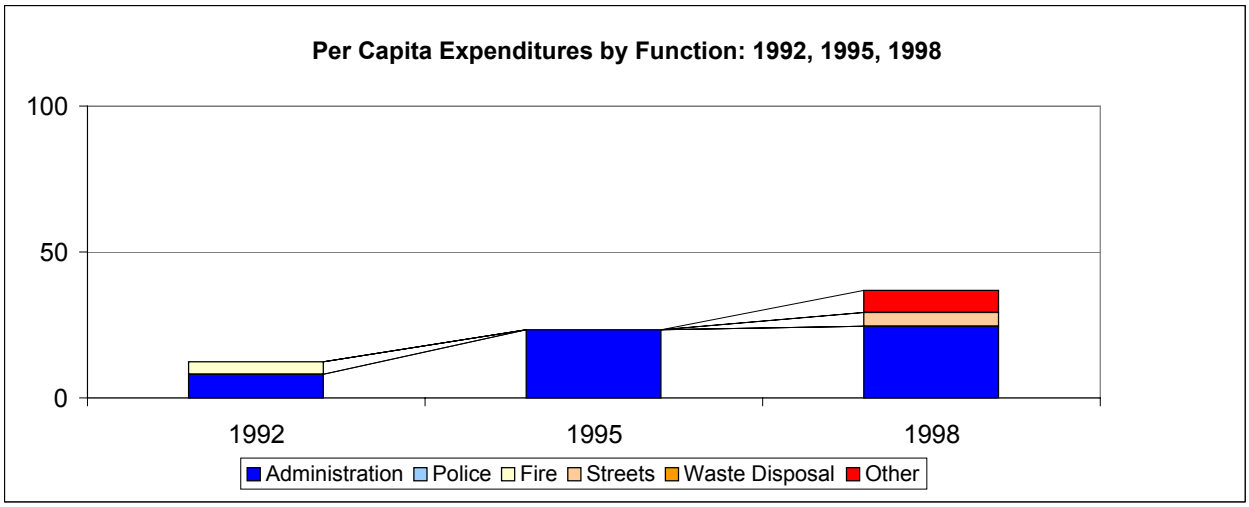
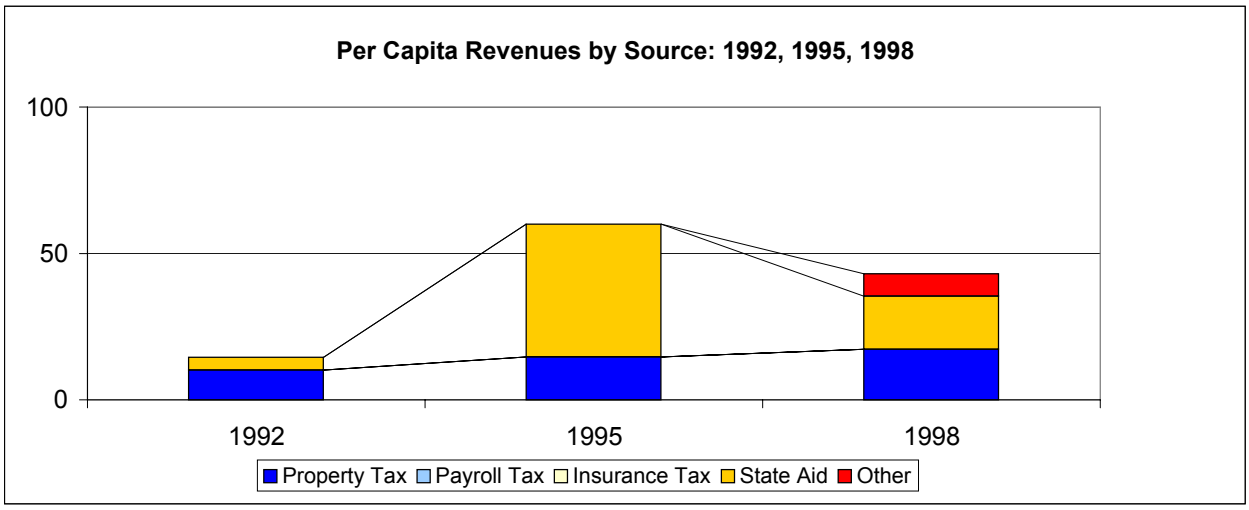


Chart 39: Ryland Heights





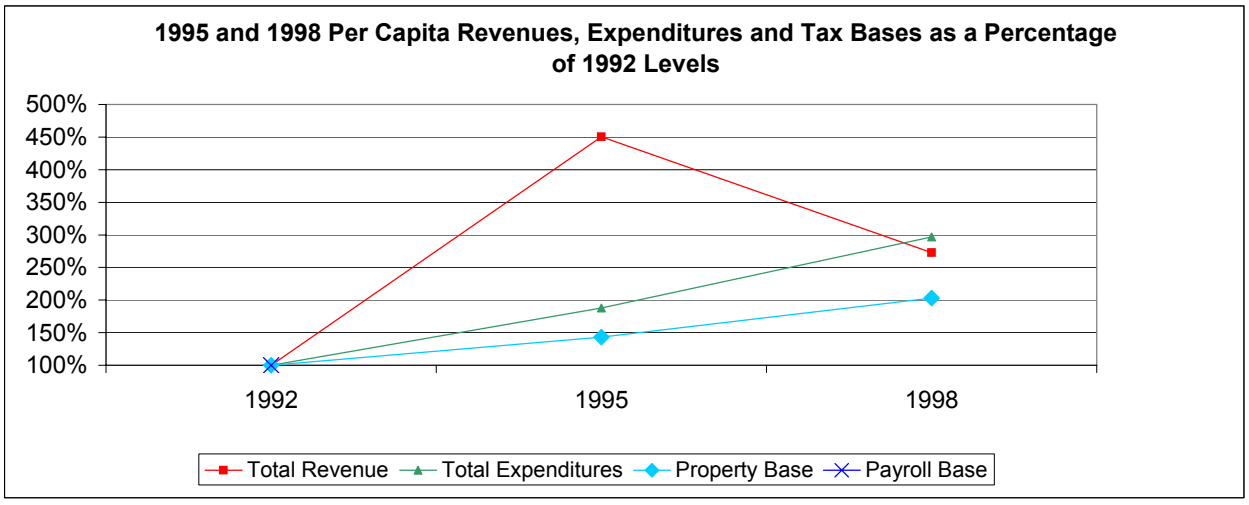
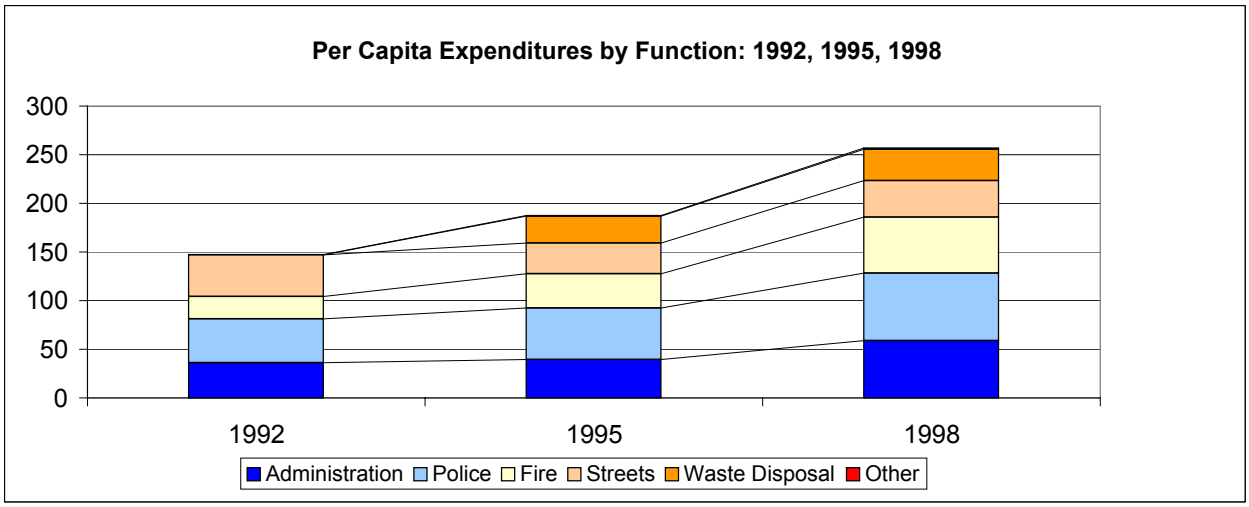
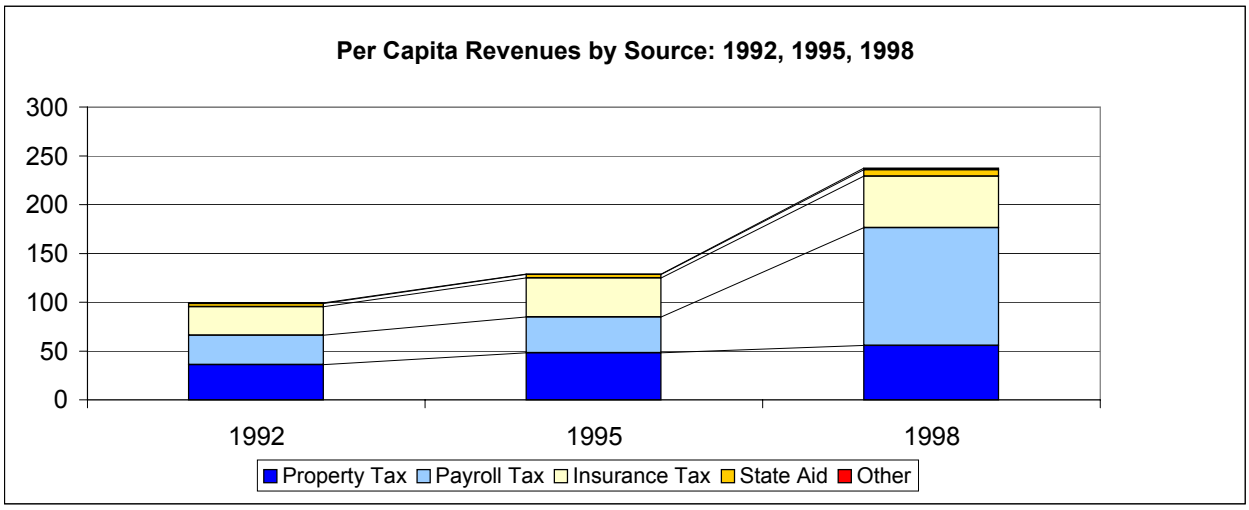


Chart 40: Taylor Mill





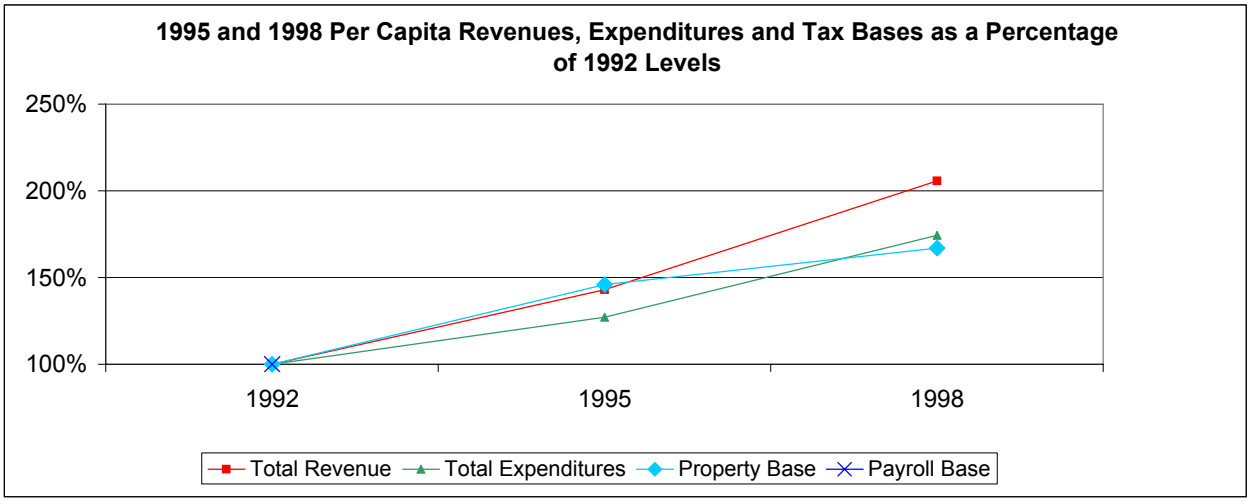
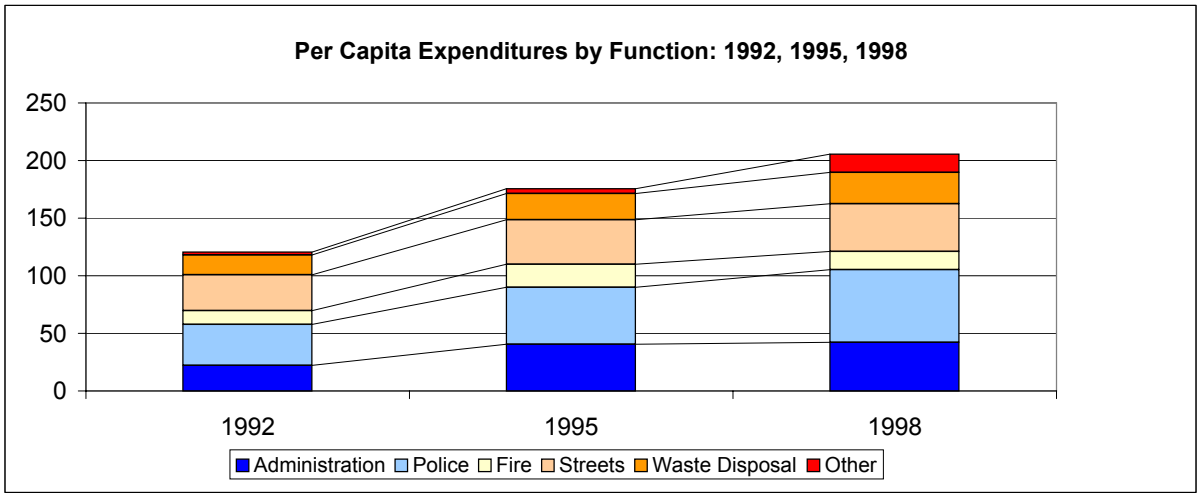
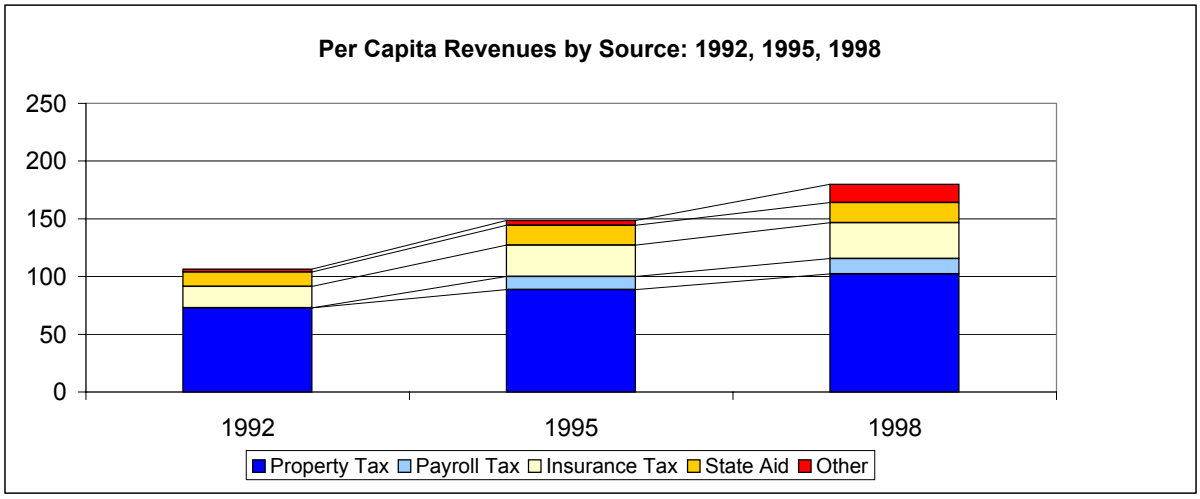
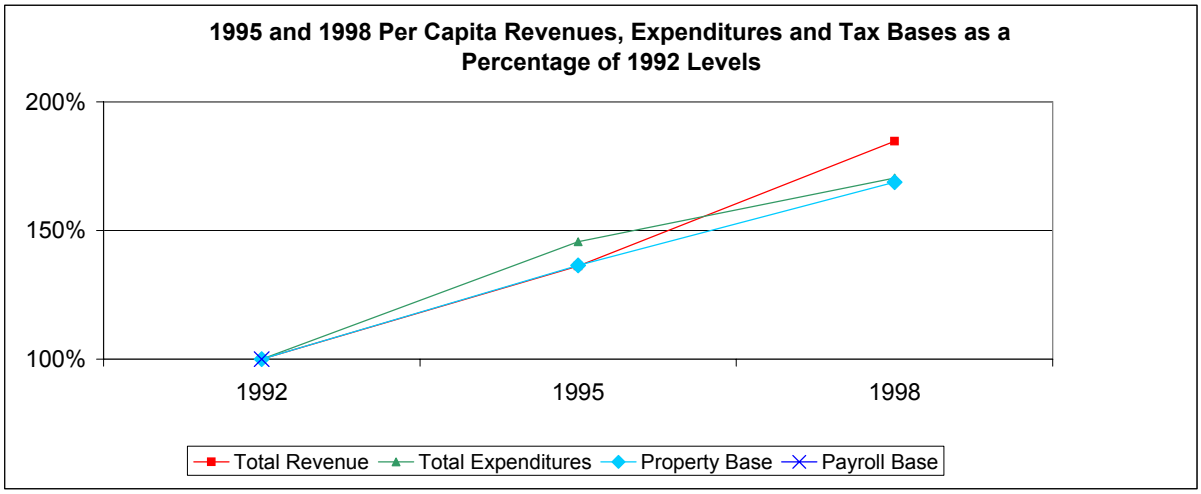


Chart 41: Villa Hills







Endnotes

[1] Data are from the *1997 Census of Governments*, Bureau of the Census.

[2] Kentucky cities are divided into 6 classes according to population. See Appendix 1. The most important distinction in the fiscal context is between 6th class cities and all others, since payroll and insurance premiums tax limitations apply only to 6th class cities.

[3] The bulk of insurance premiums tax revenues are from taxes on property and health insurance premiums. However, there is significant variation across municipalities in the exemption structure. Counties are also authorized to tax bank deposits (up to .25 percent of deposits) and insurance premiums (up to 5 percent).

[4] Bureau of the Census, http://eire.census.gov/popest/estimates.php. The Cincinnati metropolitan area is defined as the Consolidated Statistical Metropolitan Area (CMSA). The smaller Metropolitan Statistical Area (MSA) grew by just 6.6 percent from 1990 to 1999.

[5] All expenditure and revenue data are from Kentucky League of Cities compilations of fiscal data reported to the State of Kentucky through the UFIR reporting system. Data are for general fund revenue and expenditures only. In cases where a portion of revenues or expenditures were reported with special revenue fund data in one or two of the years used in the analysis, the relevant revenues and expenditures were included in the analysis to maintain comparability across years. However, it was not always possible to match expenditures with the appropriate special fund revenues. In these cases, the activity was not included in the Tables 1 and 2. Some anomalies remain even after these corrections. For instance, there are clearly cases where spending or revenue in a particular category is counted in the general fund in one year but not in another. See Chart 5 for a good example of this. Waste Disposal expenditures in Walton go from $0 in 1992 to roughly $50 per capita in 1995 but return to $0 in 1998. There is a corresponding bump upward in Other Revenues in 1995. However, since it was not possible to match the expenditure change to a specific revenue change, the anomaly could not be corrected. Similar inconsistencies occurred elsewhere, affecting the balance between revenues and expenditures in a single year, as well as changes over time. Property tax rate data are from the Revenue Cabinet, Department of Property Valuation, State of Kentucky. Payroll tax rate data are from various publications of the State and Local Tax Committee, Northern Kentucky Chamber of Commerce, Inc.

[6] Correcting for inflation, the increase was 43 percent. The consumer price index for the Cincinnati Metropolitan Area increased by 15.7 percent from 1992 to 1998. Bureau of Labor Statistics, www.bls.gov/cpi/home.htm.

[7] U.S. Bureau of the Census, *Census of Governments*, 1992 and 1997.

[8] The 19 percent estimate for Fire Protection understates its role in local budgets. Many localities in the region finance fire services through special districts that include more than one municipality. In many of these cases, these costs do not show up in municipal general funds. Appendix 2 shows the distribution of single jurisdiction and shared districts across the region.

[9] At the local level, waste disposal spending is for solid waste only, except in Florence. Waste water collection and treatment is handled by a regional sanitation district.

[10] Data are not available for Kenton Vale in 1998.

[11] A sizable portion of the Tri-County population resides in unincorporated areas. In 1998, Boone, Campbell, and Kenton Counties had populations of 55,833, 15,511, and 11,393 in their unincorporated areas respectively. In Boone County, 70 percent of the population was in unincorporated areas. In Campbell and Kenton Counties, 18 and 8 percent of the population was in unincorporated areas respectively. Residents of unincorporated areas face significantly lower property tax rates than those in municipalities since they avoid municipal levies. In addition, county property taxes (.10% in Boone, .11%

in Campbell, and .13% in Kenton in 1998) are lower than in most municipalities. Payroll taxes also tend to be relatively low in the unincorporated areas. Boone County maintains occupational tax rates of 0.5 percent of earnings for schools (with no maximum tax), 0.8% for the county government (with a $298 annual maximum per taxpayer), and 0.15% for mental health (with a $25 annual maximum per taxpayer). Payroll taxes are 1.05 percent in Campbell (with a $373 maximum on individual taxpayers and $560 on corporations) and 0.85 percent in Kenton. Municipal payroll taxes vary widely from 0 to 2.5 percent with different rules on caps.

[12] See Timothy Bartik, Who Benefits from State and Local Economic Development Policies? W.E. Upjohn Institute, Kalamazoo, 1991.

[13] The number of jobs per 100 residents is the best available measure of potential payroll tax base. Tax rates and revenues cannot be used to compute tax base in nearly one-third of Northern Kentucky municipalities because they do not assess the tax. In addition, rates and revenues would not yield comparable base estimates in the places that do use the tax because the definition of taxable income varies from place to place.

[14] The existence of unincorporated areas is not a necessary prerequisite for this process to occur. The Philadelphia wage tax, for instance, has had a much-documented negative effect on city employment, despite the fact that its metropolitan area is fully incorporated. See Luce, Thomas, "Local Taxes, Public Services, and the Intrametropolitan Location of Firms and Households," *Public Finance Quarterly*, Volume 22, no. 2, pp. 139-67, 1994.

[15] The measures used in the analysis were the percentage of elementary students eligible for the free or reduced lunch program in 2000, the age of the housing stock in 1990, the percentage point change in the school poverty rate from 1993 to 2000, and population change from 1992 to 1998. School poverty was used as a proxy for poverty in the overall population in order to use years corresponding to the fiscal data. If the overall eligibility rate is high enough, individual schools or districts may receive waivers that allow them to provide free lunches to all students. However, the variable used here shows the underlying eligibility rate, regardless of whether the waiver has been granted or not. See Ladd Helen F. and John Yinger, *America's Ailing Cities: Fiscal Health and the Design of Urban Policy*, Johns Hopkins University Press, Baltimore 1989 for a good discussion of these issues.

[16] The simple correlation between the variables in the first two columns of Table 7 is -.56 indicating a statistically significant correlation at the 99 percent confidence level.

[17] The simple correlation between state aid per capita and each of the variables is statistically insignificant and the direction of the relationship is "wrong" for two of the four (free lunch eligibility and percentage of expenditures financed by tax base increases).

[18] See Orfield, Myron, *American Metropolitics*, Brookings Institution, Washington D.C., 2002, Table 5-1.